







L. V. Smith



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CINCINNATI.

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SKETCHES AND STATISTICS

OF

CINCINNATI IN 1859.

BY CHARLES CIST.



1859

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P R E F A C E .

IN examining the present volume, it will not escape notice that many subjects comprehended in the preceding issues of 1841 and 1851 are either only briefly referred to, or entirely left out. My reasons for this, I trust, will be as satisfactory to my readers as they were conclusive on myself. I shall state them in as few words as possible.

In all publications of this nature, containing so wide a range and great amount of subjects and details, there will always be a demand for greater space than exists in the limits of an ordinary volume. The difficulty is not in gathering, but in excluding materials. In this instance, the amount to be shut out was greater than usual, because I had decided to embody in the volume a narrative of the early history of Cincinnati, extending through the first six years of its existence. A large share of the facts and incidents it embraces were drifting into oblivion, and I knew no other, certainly no readier, mode of placing them on record in permanent form than this. As one hundred and fifty pages have been taken up with this department alone, it is natural to suppose it has been done at the expense of crowding out other, perhaps equally appropriate subjects. To remedy as far as possible such neglect, I have added forty-eight pages to the volume, without increasing its price.

Another motive for excluding certain subjects was to be found in the fact, that many of them had already been given to the public, and I was unwilling, except for special reasons, to dwell a second time on the same theme. Especially was this the case in the departments of a permanent or unchanging character, such as magnetism, medical topography, geology and meteorology, which had been fully presented in my previous issues. Nor was it necessary to travel over the entire educational and commercial interests of Cincinnati, when the first has so recently, as well as comprehensively, been given to the public by John P. Foote, in his "Schools of Cincinnati," a work which has left me nothing to supply; and the second periodically and fully illustrated by William

Smith, with ability and fidelity, in his "Cincinnati Price Current." It would surely have been unjust to tax my readers anew for information to be obtained from these and other sources, including my former volumes, which at the same time were easy of access to recent settlers here, the only class of readers likely to need the information they supply.

Besides my indebtedness to individuals, acknowledged in the articles themselves, I owe to the manufacturing columns of the Cincinnati Gazette many interesting facts and notices, of which in the appropriate department I have availed myself. These extracts have been made, in most instances, at the request of the individuals whose business operations they relate to.

The opinions I have held for thirty-five years past, and repeatedly expressed, that Cincinnati is destined to become one of the most important cities in the United States, in business, population and wealth, are not now considered so visionary as numbers once deemed them to be. In the light of the vast improvements in growth of manufactures and of buildings, for the past five years, we may read what the ensuing twenty will do for this city. The author of nature has done more for this city than for any other in the Republic. If man does his share, Cincinnati will have no rival surpassing her anywhere. If this prediction fails, it will be my first that has not come to pass, even in my lifetime.

CINCINNATI, June 1, 1859.

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SKETCHES AND STATISTICS
OF
CINCINNATI IN 1859,

I. EARLY ANNALS.

The Miami country, on whose Ohio river front this city is nearly a central point, was early known to the whites, and an object of admiration for its great fertility. In 1751, Christopher Gist, agent for the old English Ohio company, explored the Great Miami river about one hundred miles, and in 1752, the English had built a fort or trading station among the Piankashaws, a tribe of the Twigtwees or Miamis, whose hunting-grounds were in the adjacent region on what is now called Loramie's creek, 4 miles north of Dayton. This post was attacked and taken by the French in the course of the same year. The Miami valleys were subsequently examined by Daniel Boone while captive to the Shawanees in 1778, and by the war parties which Bowman and Clark led against the Indians on the Little Miami and Mad rivers. But Kentucky at this period was barely able to maintain its own various stations or posts, and had neither leisure nor men to spare for effecting a lodgment in the neighborhood of this tribe of Indians, already well known to be one of the most efficient and inveterate enemies of the Kentucky settlers. Treaties with the various savage tribes having been made or renewed in 1784, 1785 and 1786, by which the country upon the Muskingum, Scioto and the Miamis was ceded to the whites; among others whose attention was directed to the settlement of the new country was Benjamin Stites, of Redstone—now Brownsville—Pennsylvania. He visited New York to purchase from congress for himself and associates, a tract on the Miamis, and there proposed to John Cleves Symmes, a member of congress from New Jersey, to

unite in the enterprise, relying probably on his official influence to effect the purchase. Mr. Symmes decided on seeing the country before entering into any contract, and on his return completed the arrangement in his own name. The tract thus purchased was supposed to contain one million acres of land upon the Ohio, and lying between the Miamis. On actual survey, however, this extent was reduced to less than six hundred thousand acres. Of this purchase ten thousand acres at the mouth of the Little Miami were shortly after sold by the patentee to Mr. Stites, and in January, 1788, Matthias Denman, of Springfield, Essex county, New Jersey, purchased of John Cleves Symmes, among other tracts of land in the Miami region, the entire section No. 18, and the fractional section No. 17, which connects it with the river Ohio. These belonged to the fourth fractional townships of the first fractional range on the Ohio river. As the Miami country had not yet been surveyed, the description of the tract purchased simply specified, that it should be located as nearly as possible opposite the mouth of the Licking river, and when the surveys had been completed, section 18 and fractional section 17 were accepted as the contents and boundaries contemplated by the conveyance.

On actual survey, the tract was found to comprehend seven hundred and forty acres; and constitutes that part of the present city which lies north and south between Liberty street and the river Ohio, and east and west, between a line from a point where the Lebanon road intersects Liberty street to the Ohio river, one hundred feet below Broadway, and a parallel line from the intersection of Liberty street with Western Row, which strikes the river just below Smith street landing. This territory will square $1\frac{1}{6}$ miles, and comprehends less than one sixth of the present area of Cincinnati. It has been repeatedly asserted in print that the purchase cost forty-nine dollars, only, but the sum actually paid for it was almost five hundred dollars; the price being five shillings—sixty-six and two-third cts. per acre.

Denman's design, in making this purchase, was to form a station, lay out a town opposite the mouth of Licking river, and establish a ferry at this point. This last object, undoubtedly, was the most important of the three, although the fact would be incomprehensible to the present inhabitants of Cincinnati.

The old Indian war-path from the British garrison, at Detroit, crossed the Ohio at this point, which was also the usual avenue by

which the savages on the northern side of the Ohio, approached the Kentucky stations.

In the course of the ensuing summer, Col. Robert Patterson, a gallant soldier in the Indian wars of that period, and John Filson, both of Lexington, Kentucky, became associated with Denman in the enterprise. Filson, who was a school-master and surveyor by profession, was needed in the latter capacity, to survey and lay off the proposed town into in and out-lots; and the high personal character of Col. Patterson would naturally give popularity to the project.

Filson proposed as the name of the future Cincinnati, Losantiville, a pedantic compound of Greek, Latin and French, intended to signify "the town opposite the mouth" of Licking.

The proprietors of the new enterprise, just before starting out, issued the following, which was published in the *Kentucky Gazette*, of that date:

NOTICE—The subscribers being proprietors of a tract of land opposite the mouth of Licking river, on the northwest of the Ohio, have determined to lay off a town upon that excellent situation. The local and natural advantages speak its future prosperity; being equal if not superior to any on the bank of the Ohio river, between the Miamis. The in-lots to be each half an acre, and the out-lots four acres. Thirty of each to be given settlers, upon paying one dollar and fifty cents for survey and deed of each lot. The 15th day of September is appointed for a large company to meet at Lexington, and make out a road from there to the mouth of Licking, provided Judge Symmes arrives, being daily expected. When the town is laid off, lots will be given to such as may become residents, before the first of April next.

MATTHIAS DENMAN,
ROBERT PATTERSON,
JOHN FILSON.

Lexington, Ky., Sept. 6, 1788.

In September, 1788, a large party, embracing Symmes, Stites, Denman, Patterson, Filson, Ludlow, with others, left Maysville—then Limestone—to visit the new Miami purchase. This company, consisting of nearly sixty men, landed at the mouth of the Great Miami, and explored the country for some distance back from that point and North Bend. Symmes decided from the examination to locate himself and adherents at North Bend; and the party return-

ing measured the distance between the two Miamis, following the meanders of the Ohio, and then returned to Maysville. On this trip Filson became separated from his party while in the rear of North Bend, and was never more heard of, having, doubtless, been killed by the Indians, a fate of which he always seemed to have entertained a presentiment. Israel Ludlow, who had intended to act as surveyor to Symmes, now accepted Filson's interest, and assumed his duties in laying out the proposed town.

On the 17th of November, 1788, Benjamin Stites left Maysville with a party of twenty-six persons, mostly emigrants, from Brownsville—then Redstone—Pennsylvania, and landing on the 18th, not far below the mouth of the Little Miami, where he had made a purchase of ten thousand acres of land from Symmes, commenced the settlement of a town which was named Columbia. Patterson, with a party of twenty-six persons, who had agreed to assemble at Maysville, followed on the 24th of December, the river Ohio being filled with drift ice, from shore to shore. No record has been kept of the day of their landing, although the 26th had been once or twice traditionally kept as its anniversary, upon no other grounds, apparently, than that two days ought to take a flat-boat down the Ohio sixty-five miles. But in the existing condition of the river, covered with drift ice, it must be obvious, that nothing reliable can be deduced from such data.

In the trial of the chancery case, in 1807—*City of Cincinnati vs. Joel Williams*—the date of the landing was variously given. One of the witnesses says it was late in December, 1788. Patterson and Ludlow state it to have been in January, 1789; while Wm. M'Millan is the only witness who gives the precise day. He testifies "that he was one of those who formed the settlement of Cincinnati, on the 28th day of December, 1788." Mr. M'Millan was an intelligent lawyer, and magistrate here for many years; a man of scrupulously exact habits of business. I have no doubt that he has given us the proper date. Judge Burnet, whose professional business as a lawyer prompted him to ascertain the fact, assured me that he never entertained a doubt that this was the correct date. I have other evidence, which, while it does not determine the precise day, abundantly satisfies me that December, 1788, was the true month and year in issue.

It is not a little remarkable, in this connection, that the date of the landing of the Pilgrims at Plymouth, is involved in the same

condition of conflicting testimony ; and Sherman, in his history of the United States, speaking of the Pilgrims, says, "On the tenth of November, they floated into a commodious bay, where they afterward landed, and planted there a settlement and called it Plymouth, that being the name of the port from which they sailed in England, having touched there, in their voyage from Holland." He then in a note adds, "Historians differ so as to the day in which they landed, that I have not named it in my text. Some say it was on the 17th of November ; others, on the 22d of December ; and others on the 31st of December. It is generally supposed to have been on the 22d of December." Of the precise spot where our Cincinnati founders landed, there is no such doubt. They fastened their boat in Yeatman's cove, being an inlet opposite Sycamore st., and named so from the late Griffin Yeatman, who resided for many years where that street intersects the public-landing.

The names of those who thus landed as settlers, were, beside those of Patterson and Ludlow, the proprietors, William M'Millan, Robert Caldwell, Thaddeus Bruen, William Connell, Francis Hargesty, Matthew Fowler, Isaac Tuttle, — Henry, Evan Shelby, Luther Kitchell, Elijah Martin, James Carpenter, John Vance, Sylvester White, Matthew Campbell, Samuel Mooney, Henry Lindsay, Joseph Thornton, Noah Badgely, Thomas Gissel, Joel Williams, Samuel Blackburn, Scott Traverse, and John Porter; in all twenty-six persons. Of these, the last fifteen named remained and drew lots among the thirty original grantees, to whom I shall presently refer; of the residue, some preferred other employments to clearing and cultivating the soil. Tuttle, Henry, and, perhaps others, attached themselves to Symmes, in the enterprise at North Bend, which commenced a few weeks later.

The article of agreement entered into between the proprietors and the original settlers is in these terms:

"The conditions for settling the town of Losantiburg are as follows, viz: that the first thirty *in* and *out*-lots of said town to as many of the most early adventurers shall be given by the proprietary, Messrs. Denman, Ludlow and Patterson, who for their part do agree to make a deed or fee simple, clear of all charge and incumbrance, except the expense of surveying and deeding the same, so soon as Judge Symmes can obtain a deed from congress.

"The lot-holders, for their part, do agree to become actual settlers on the premises. They shall plant and attend two crops suc-

cessively, and not less than an acre shall be cultivated for each crop. And within two years from the date hereof, each person who receives a donation lot or lots shall build a house equal to twenty-five feet square, one and a half stories high, with brick, stone or clay chimney—which house shall stand on the front of their respective lots, and shall be put in tenable repair, all within the term of two years.

“These requisitions shall be minutely complied with, on the penalty of forfeiture, unless it be found impracticable on account of savage depredations.

“The following is a list of in and out donation lots, as drawn at Losantiville, by lottery, January 7, 1789:”

<i>Settlers.</i>	<i>No. of In-Lot.</i>	<i>Out-Lot.</i>
Samuel Blackburn.....	1	29
Sylvester White.....	2	15
Joseph Thornton.....	3	28
John Vance.....	4	24
James Dumont.....	5	11
— Fulton.....	6	23
Elijah Martin.....	7	26
Isaac Vanmeter.....	8	18
Thomas Gissel.....	9	17
David M'Clever.....	26	6
— Davidson.....	27	19
Matthew Campbell.....	28	8
James Monson.....	29	14
James McConnell.....	30	5
Noah Badgely.....	31	22
James Carpenter.....	32	1
Samuel Mooney.....	33	14
James Campbell.....	34	21
Isaac Freeman.....	51	29
Scott Traverse.....	52	9
Benjamin Dumont.....	53	25
Jesse Stewart.....	54	30
Henry Bechtle.....	56	16
Richard Stewart.....	57	12
Luther Kitchell.....	58	13
Ephraim Kibby.....	59	4
Henry Lindsay.....	76	7
John Porter.....	77	2
Daniel Shoemaker.....	78	27
Joel Williams.....	79	3

This agreement and list are taken from a memorandum made at the time and found among Colonel Patterson's papers by his heirs.

I have already given portions of this list as those who accompanied Colonel Patterson and Ludlow in the first landing at the place of settlement. Of the residue, Kibby and Shoemaker will be found among those who made the first settlement at Columbia with Stites' party, and the names, doubtless, of stragglers, who followed the first settlers, will complete the list.

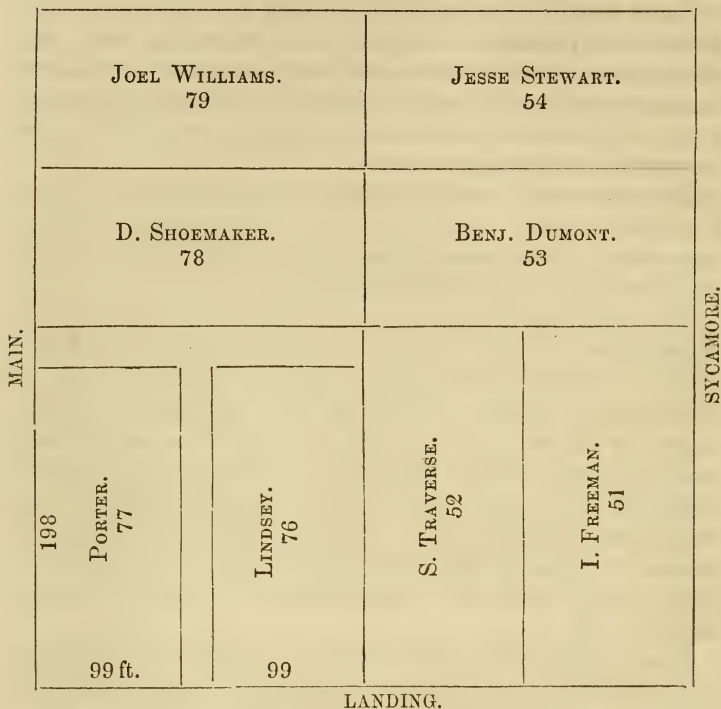
The open space now constituting the public wharf, extending from *Eastern Row*, now *Broadway*, to *Main* street, was made a common or public ground forever, reserving the privilege to the proprietors of a ferry, within those limits.

The thirty in-lots embrace the entire blocks between Front and Second, from Main to Broadway; the block from Second to Third, between Broadway and Sycamore; and the eastern half of the block between Second and Third, and Main and Sycamore, excepting the lot No. 55 on the town plat, at the N. W. corner of Second and Sycamore, which was injured in value by a portion of it being embraced in a swamp, which for years intersected Sycamore and Second, then Columbia street. These lots, facing or being contiguous to the public landing, were naturally the most desirable lots, being then as much so for convenience as they now are for business purposes.

It may serve to show how slowly city property rose in value, that one-half of lot No. 76 was sold to J. & A. Hunt, on the 30th of September, 1796, at four dollars. This is the property on Front near Main street, now occupied by Luther F. Potter, and Traber & Aubery, which, if even stripped of its present improvements, would now sell for more than one thousand dollars per front foot, or fifty thousand dollars for the half lot.

I have not been able to learn the price at which the proprietors originally held the in and out-lots not comprehended in the thirty of each thus made a gratuity to the first thirty settlers. That it must have been a low figure may be readily inferred from the fact, that in payment of a balance, less than one hundred dollars, due by the proprietors to Ludlow for surveying fees, he preferred taking one hundred and twenty acres, seven miles from town, to four out-lots and an entire square, of which Pearl street is now the centre, worth now, as naked ground, more than two million dollars.

The following diagram of one block, will serve to give an idea of the shape, size, and locality of the whole :



The naked ground of the block thus made a gratuity to actual settlers, is now worth at least one and a-half million dollars, by which, I mean, that any portion of twenty-five feet front, by one hundred deep, if divested of its improvements, would sell for cash, at sheriff's sale, for an amount bearing the full proportion to that sum, which the ground in space bears to the entire square. The out-lots, each of which formed one of our present squares, all lay north of Seventh street.

There has been considerable dispute as to the fact, whether the town, as laid out by Ludlow, was actually called Losantiville. The article of agreement of the proprietors and settlers would seem to recognize another name than that of Cincinnati; but, on the other hand, the absence of date and of other formalities in the paper, and the entire ignorance in which to this day we remain as to the writer of

the document, the carelessness which employs the name Losantiburg in one place and Losantiville in another, forbid laying any great stress on what that agreement is supposed thus to prove. It is probable that the name, as a practical question, did not come up at this period—January 7, 1789, and that it was not until it became necessary to make out a regular plat of the whole town for record, that the name was affixed or decided on at all.

A letter in my possession from Dr. Daniel Drake has a stronger bearing on the question. It is as follows:

CINCINNATI, *January 2, 1841.*

DEAR SIR—My brother informs me that you called last evening to inquire of me whether I have seen any authentic evidence that Cincinnati was originally named Losantiville. As I shall embark in the mail-packet this morning, at ten o'clock, for Louisville, you cannot have an opportunity of seeing me, and I, therefore, drop you a line, to say that I have in my possession more than twenty documentary evidences that such was the fact.

The name was invented by John Filson, one of the original proprietors, who intended to express by it, *the town opposite the mouth of Licking river*. He resided in Lexington, Ky., where the plan of the projected village was formed, and the name imposed in the month of August, 1788.

The settlement did not, however, commence till the 26th of the following December. From that time till the 2d of January, 1790—this day fifty-one years—the place bore the name of Losantiville and no other. It was then changed to Cincinnati by Governor St. Clair.

Your friend and servant,

CHARLES CIST.

DAN. DRAKE.

I must be permitted to remark that, while I consider Dr. Drake's statement of the "more than twenty documentary evidences" explicit and reliable, I do not regard it as conclusive, because the writer evidently had not time or motive to examine it in the light of the difficulty I had presented to him, and which he had perhaps never heard of before. He probably had letters, for I have seen such of the early dates of Cincinnati addressed to Losantiville, but it is obvious that such proof would not determine the fact. The name first designed having originated at Lexington would be widely known there, and letters thence would naturally bear the intended name of the place; and, indeed, where a name is once given, offi-

cially or by custom, it is apt to adhere, long after it has become changed by law or otherwise. Thus Maysville and Brownsville were known as Limestone and Redstone, and called nothing else, long after they had borne their present names in print. Washington, Pennsylvania, was called Catfishtown for many years, although only a sobriquet or nickname, and it will be many years before our north-western section of Cincinnati ceases to be known by any other title than Texas, although a mere flash name.

To these testimonies and to the popular notion that the place was given its present name by General St. Clair, on the 2d January, 1790, I have to oppose the testimony, among others, of Jacob Fowler and Samuel Newell, highly intelligent men and old settlers—Fowler having supplied the garrison at Fort Washington with buffalo meat, from its establishment up to St. Clair's arrival and afterward. They both aver that from their earliest knowledge of it they never heard it called Losantiville; and Fowler, who was as clear-headed in his recollections of the past as any man I have ever known, stated to me explicitly that he never heard it called by any other name than that of Cincinnati.

The communication of Judge Burnet, which follows, in my judgment, is testimony which cannot be disputed and argument which must be conclusive:

CINCINNATI, *October 5, 1844.*

DEAR SIR—At the close of a conversation which passed between us a few weeks since, respecting the original plan and name of the place, which is now familiarly called the Queen City of the West, you requested me to furnish you with such reminiscences in relation to that subject as my early residence in the West might enable me to give.

You are aware that I was not among the first adventurers to the Miami valley. When the settlement of it began I had not finished my education; but I commenced my journey to join the little band of adventurers as soon as my professional studies were closed, which was in the spring, after the treaty of Greenville, in 1795, had terminated the Indian war; of course the town had been laid out, and the settlement of it commenced, before my arrival. It had, however, made but little progress, either in population or improvement; though it contained a larger number of inhabitants than any other American village in the territory, excepting Marietta; and if you take into the account the officers and soldiers of the

garrison, and others attached to the army, it very much exceeded the population of that place.

“Most of the persons who saw the town laid out, and put up the first cabins erected in it, were here when I came, and were my earliest companions and associates. Without professing an unusual share of curiosity, it is natural to suppose, that I learnt from them, correctly, the few and simple historical facts of the place, which, for good or ill, I had selected for life as my residence. By way of comparison, it may be said, that the facts connected with the recent location of the Cincinnati Observatory—the donation made by our distinguished fellow-citizen, N. Longworth, Esq.—the ceremony of laying the corner-stone of the edifice, by the venerable sage and patriot of Quincy, and the name of Mount Adams then publicly given to it, are not more distinctly known, as matters of history, than were the facts of the laying out, establishing and naming of the town of Cincinnati, at the time to which I refer. They were a subject of inquiry by every stranger who came to the place, and every person in the village could recite them. There was but one version to the story, which was this: that Mr. Denman, of New Jersey, entered into a contract with Col. Robert Patterson, of Lexington, and John Filson, a surveyor in the employ of Judge Symmes, to lay out the land opposite the mouth of Licking river, then the exclusive property of Mr. Denman. A plat of the contemplated town was made out, and Losantiville agreed upon as its name; but before any step was taken to carry that contract into effect, and before a chain had been stretched on the ground, Mr. Filson was killed by the Indians, not having done anything to fulfill his part of the contract; in consequence of which it was forfeited, and the projected town fell through. This is all that was ever done toward the establishment of a town by the name of Losantiville; yet, as was natural, the settlement, then just beginning was for some time called by the intended name of the projected town.

“Early in the next season, Mr. Denman entered into a new contract with Col. Patterson and Israel Ludlow, to lay out a town on the same ground, but on a different plan from the one formerly agreed upon. To that town they gave the name of Cincinnati, and by that name it was surveyed and known in the fall of 1789.

“I was informed by Judge Turner, one of the earliest adventurers to the West, that he had seen both plats, and that the general outline and plan of division were nearly the same in both, but that

the first or Filson plat, to which the name of Losantiville was to have been given, set apart two entire blocks for the use of the town, and that it gave as a public common, all the ground between Front street and the river, extending from Eastern Row to Western Row, then the extreme boundaries of the town plat: and it is impressed upon my mind, though I cannot say what caused that impression, that on the first or Filson plat, Front street was laid down nearer to the river, or made more southing in its course westward, than we find it on the plat of Cincinnati. I was also informed that some of the names which had been selected for streets of the Losantiville plan, were given to streets on the plan of Cincinnati, and that others were rejected. This circumstance may account for a fact, which is no doubt remembered by many now living in the city, that after Joel Williams had become proprietor, by purchasing the right of Mr. Denman, and had determined to claim the public common, as private property, an unsuccessful effort was made to change the names of some of the streets on the genuine plat of Cincinnati by substituting others, taken from the plat of Filson. That attempt created some temporary difficulty in the minds of persons not correctly informed, as to the true history of the town, and many took the precaution of inserting both the names in their deeds and contracts.

“But independent of these facts, it must be evident that the name of the town could not have been changed after the town had been established, named and surveyed. The territorial statute of December, 1800, which I advocated and voted for in the Legislative Council, made it the duty of the proprietors of every town which had been laid out in the territory, before that time, to cause a true and correct map, or plat thereof to be recorded in the recorder's office of the county in which it lay, within one year after the passage of the act, under a heavy penalty.

“The name of the town constitutes as important a part of the plat of it as the names of the streets or the numbers of lots, and the title to property acquired in it, is affected as much by error, mistake or uncertainty, in the one, as in the other; it was therefore considered important for the security of property holders that a true record should be made of these matters, and of everything else appertaining to the plat, precisely as they were when the town was established, and the sale of the lots commenced. Hence, the law re-

quired a true and correct plat—in other words, the original plat, without change or variation, to be recorded.

“When the plan of Cincinnati was recorded by Israel Ludlow in 1801—the original proprietors were all living, he being one of them. It is therefore impossible to suppose, that he did not know what the original plat contained—or that he acted without authority—or that he would falsify the plat by placing on it any name other than the one originally given to it. I was intimately acquainted with Col. Ludlow who recorded the town plat, and was professionally consulted by him as to the requirements of the statute. He was very much annoyed by interference of Joel Williams, a sub-proprietor, who insisted on making innovations, or changes in the original plat, calculated to favor a claim he was setting up to the public common for landing. I gave it as my opinion that Mr. Williams not being an original proprietor, or even a resident of the country when the town plat was formed and established, and having had no agency in the formation of the original plan of the town, could not be presumed to know what it was: and moreover, that the statute did not recognize him as having any other or greater authority to interfere in the matter, than any other individual who had become the purchaser of a single lot.

“The result was, that each of those individuals prepared and lodged in the recorder’s office, a plat of the town, affirming it to be a true copy from the original. Unfortunately, perhaps—certainly without legal authority, the recorder placed both plats on the record, but the community soon became satisfied, that the plat prepared and certified by Col. Ludlow, was alone to be relied on.

“This, however, has no other bearing on the subject matter of our conversation, than arises from the fact, that each of them affirmed Cincinnati to be the true, original name of the town.

“The controversy between them continued for several months, and was marked with great warmth. On one occasion it terminated in a violent personal conflict, in which the original plat of the town, made and agreed to by the proprietors at Limestone, in the winter of 1788–9, bearing on its face the name of Cincinnati, was torn in pieces, each party retaining a part of it. In this altercation Colonel Ludlow took the ground that Williams was an unauthorized intruder, and that the statute made it his duty, as an original proprietor, to record the plat, correctly and faithfully as it came from the proprietors; neither adding to, subtracting from or altering anything

which was on it when it was agreed to and signed by the proprietors.

“To show how firmly he adhered to that principle I will mention one case. The ground bounded by Broadway, Front street, Main street and the river, had been publicly given, and set apart by the proprietors, with his knowledge and concurrence, as a common, for the use of the town forever. This fact he knew and affirmed, but, because the word common had not been written on the map within the lines inclosing that donation, or elsewhere, he refused to insert it on the copy made for the recorder; and yet it is affirmed by implication that he deliberately made out and placed on record a plat of the town, affirming it to be a true copy of the original, knowing that it contained a name altogether different from the one which had been in the first instance adopted and entered on the plat.

“I will state further that, at an early period, professional duty made it necessary for me to investigate the facts connected with the origin and establishment of Cincinnati, which did not extend to any other individual then or now living, and it so happened that the performance of that duty was required at a time when the town was almost in its incipient state, and when all the original proprietors and most of the first adventurers and settlers were living within the village or in places easily accessible.

“Without presuming to claim more of tact or industry than belongs to the profession generally, it may be presumed, considering the sources of correct information then within my reach, that I must, at least, have ascertained the name of the place, the establishment and history of which I was investigating.

“It has been already intimated that Joel Williams, soon after he purchased the proprietary right of Mr. Denman, set up a claim to the common before described, alleging it to be private property, reserved by the proprietors for future disposition. On the strength of that pretence he erected a brick house on the northwest corner of the tract in question. In consequence of this movement a number of the most public-spirited of our citizens—Martin Baum, Jesse Hunt and General Findley taking the lead—raised a fund by subscription, to defend and sustain the right of the town. I was employed to collect and perpetuate the testimony applicable to the case; and you will not hesitate to believe that, in executing that commission, my inquiries were directed to the original proprietors and to such other persons as were likely to have any knowledge of

the facts, touching the laying out of the town and the matters contained on the original plat. I mention this to show that there was something more than curiosity prompting me to this investigation of the early history of the town, which ought to entitle it to credence.

“Now, let any person ask himself what description of facts were likely to be disclosed in the course of such an examination, and the answer will be, precisely such as were stated in the preceding part of this letter, if they existed, although they could not have any bearing on the matter then in controversy. On the supposition that they did not exist, was there a sufficient motive to induce anybody to fabricate them? It would be difficult to assign a reason in favor of an affirmative answer.

“You will perceive that, to sustain the right of the town to the common, it was necessary to prove the correctness of the plat recorded by Ludlow, which affirmed Cincinnati to be the true, original and only name of the town. In pursuing that inquiry the facts came out that there had been a previous project for laying out a town, the name of which was to have been Losantiville, but that that project had fallen through. As that matter had no relation to the subject I was specially investigating, it was not noticed in the depositions, but omitted as irrelevant.

“Having said thus much on the subject of our conversation, I will state as information which may be interesting, if not useful, that in November, 1794, Samuel Freeman purchased the unsold interest of Robert Patterson in the town section and fraction—that in March, 1795, Joel Williams purchased the unsold interest of Mr. Denman, and in November, 1803, he also purchased of Samuel Freeman the proprietary interest acquired by his purchase from Colonel Patterson, by which he owned and represented two shares, or equal third parts of the unsold lots and ground in the section and fraction.

“You are, no doubt, acquainted with the fact that, by an arrangement between Judge Symmes and the first proprietors of the town, he was to retain the title in trust for them, and to execute deeds to the purchasers of lots, on their producing certificates of the respective purchases, signed by any two of the proprietors. You have also, it is presumed, heard that all those certificates, of which no record has been preserved, were consumed in the conflagration of Judge Symmes' house. These facts, connected with the sale of Freeman's entire proprietary right to Joel Williams, may possi-

bly account for the link which is said to be wanting in the chain of title to part of the ground, lying west of the town plat, now held under Joel Williams. That fatal fire may have consumed the documents required to make out a complete paper title.

“This conjecture is in some measure corroborated by a reference to the peculiarities of Mr. Williams, who had an active mind—was somewhat eccentric—possessed a vein of humor, and could at times be very sarcastic. He was, however, quite illiterate and unusually careless, and, having great confidence in Judge Symmes, he generally relied on him as a friend and adviser, though, on one or two occasions, there was some serious misunderstanding between them. I was frequently engaged for him, in his legal controversies, and it so happened that a paper required in his cause was found in the keeping of Judge Symmes. I have several times, when calling on him for papers, seen him open and examine the contents of his desk, which gave me an opportunity of knowing that even the most valuable of his papers were kept in a very careless and slovenly manner; and I have often thought that it would have been better for him if all his papers had been in the safe keeping of a guardian or friend; and particularly so, as every person who had been a purchaser of a town property was exposed more or less to the consequence of his carelessness, resulting from the peculiar manner in which titles to property, within the town section or fraction, though beyond the limits of the town plat, were to be obtained. To illustrate my meaning: there have been cases in which non-residents have purchased lots, obtained their certificates, and left them in the hands of Judge Symmes, without calling for deeds: after the burning of the Judge’s house, and the consequent destruction of their evidence of title, other persons, by a fresh purchase, or otherwise, have become the legal owners of the same lots.

Very respectfully,

“CHARLES CIST.

J. BURNET.”

Three or four cabins were put up by the new colony as speedily as possible, the first of which was built upon Front, east of Main st.; and in the course of January following was completed the survey and laying off of the town, then covered with sycamore and sugar trees in the first or lower table, and beech and oak upon the upper or second table. Through this dense forest the streets were laid out, their corners being marked upon the trees. This survey ex-

tended from Eastern Row, now Broadway, to Western Row, and from the river as far as to Northern Row, now Seventh street. The population of the place had become, by May, 1789, eleven families, besides twenty-four unmarried men, dwelling in about twenty cabins, principally adjacent to the present landing. The larger part of the trees in the bottom between Walnut street and Broadway were cut down, but remained on the ground for several years.

At this period an abundant supply of game and fish made good the failure of the provisions brought by the settlers. The Indians, although unfriendly, had as yet committed no hostilities or even depredations.

About the first of June, 1789, Major Doughty arrived with one hundred and forty men from Fort Harmar, on the Muskingum, and built four block-houses nearly opposite the mouth of Licking. When these were finished, within a lot of fifteen acres reserved by the United States, and immediately on the line of Third street, between Broadway and Lawrence street, he commenced the construction of Fort Washington. This building, of a square form, was simply a fortification of logs hewed and squared, each side about one hundred and eighty feet in length, formed into barracks two stories high. It was connected at the corners by high pickets with bastions or block-houses, also of hewed logs, and projecting about ten feet in front of each side of the fort, so that the cannon placed within them could be brought to rake the walls. At the centre of the south side or front of the fort was the principal gateway, a passage through this line of barracks about twelve feet wide and ten feet high, secured by strong wooden doors of similar dimensions. As an appendage to the fort, on its north side, and inclosed with high palisades extending from its northeast and northwest corners to a block-house, was a small triangular space, in which were shops for the accommodation of the artificers. Extending along the whole front of the fort was a fine esplanade, about eighty feet wide, and inclosed with a handsome paling on the brow of the bank, the descent from which to the lower bottom was sloping about thirty feet. The exterior of the fort was white-washed, and at a short distance presented a handsome and imposing appearance. On the eastern side were the officers' gardens, finely cultivated, ornamented with handsome summer-houses, and yielding in their season abundance of vegetables. The site of this

building is that part of Third street opposite the Bazaar, and extending an average breadth of about sixty feet beyond the line of the street on both sides.

Fort Washington was completed by November. On the 29th of the succeeding month, General Harmar arrived with three hundred men and took possession of it.

In the course of this year, several log houses, and one frame, were built; and some of the out lots, north of Seventh st., cleared. The legal title to the ground on which the town was built, being still in John Cleves Symmes, the patentee, all the deeds for the original in and out lots, were made in his name. In 1790, the lots, on fractional section No. 12, were laid out by Symmes as an addition to the town plat. General Arthur St. Clair, at this time, was the governor of the northwestern territory, and, in January, 1790, arrived at the village for the purpose of organizing the county, which, at the suggestion of Symmes, was called Hamilton, in compliment to the then Secretary of the Treasury. This county covered the whole territory west of the Muskingum; and Cincinnati was then, as it ever since has been, its seat of justice. The town had an increase of forty families this year, and about as many cabins were erected; two frame buildings were also added, during the same time. Fifteen or twenty of the inhabitants and neighbors were killed by the Indians, in the course of 1790. The increase at Columbia, near the Little Miami, was rather greater, and a new station called Colerain, seventeen miles northwest of Cincinnati, on the Great Miami, was laid out. Four or five other stations around the village, and generally within five or six miles, were also erected. At these places General Harmar stationed a few regulars for their defense. The Indians were constantly prowling around the neighborhood, and those who ventured outside their forts, did so at the peril of their lives.

Let us now leave the settlers at Cincinnati making their improvements and accompany Judge Symmes, at this period, January, 1789, starting out to his domains at North Bend, to lay off *the* great city of the Miami Purchase.

Before leaving Limestone for North Bend, Symmes—following the example of William Penn, who, before leaving England, dispatched a letter of friendship to his new Indian neighbors—sent the following epistle to his red brethren of the Miami country:

“Brothers of the Wyandots and Shawanese! Hearken to your brother, who is coming to live at the Great Miami. He was on the Great Miami last summer, while the deer was yet red, and met with one of your camps; he did no harm to anything which you had in your camp; he held back his young men from hurting you or your horses, and would not let them take your skins or meat, though your brothers were very hungry. All this he did because he was your brother, and would live in peace with the Red people. If the Red people will live in friendship with him, and his young men, who came from the great Salt ocean, to plant corn and build cabins on the land between the Great and Little Miami, then the White and Red people shall all be brothers and live together, and we will buy your furs and skins, and sell you blankets and rifles, and powder and lead and rum, and everything that our Red brothers may want in hunting and in their towns.

“Brothers! A treaty is holding at Muskingum. Great men from the thirteen fires are there, to meet the Chiefs and head men of all the nations of the Red people. May the Great Spirit direct all their councils for peace! But the great men and the wise men of the Red and White people cannot keep peace and friendship long, unless we, who are their sons and warriors, will also bury the hatchet and live in peace.

“Brothers! I send you a string of white beads, and write to you with my own hand, that you may believe what I say. I am your brother, and will be kind to you while you remain in peace. Farewell!

“Jan. the 3d, 1789.

JNO. C. SYMMES.”

There is this great difference in their letters, although there is so much general similarity in almost every respect as to inspire belief that the one suggested the other—that, in Penn’s letter, he says: “Nor will I ever allow any of my people to sell *rumme*, to make your people drunk.” Symmes, on the contrary, proposes to sell them rum, as well as rifles, powder and lead.

On the 29th January, 1789, Symmes left Maysville, accompanied by Captain Kearsay and thirteen men, detailed for the protection of the new settlement. The river was uncommonly high—the freshet of that date being higher than any since 1773, and higher than any subsequently, until those of 1832 and 1847. On reaching Columbia he found the place under water, with the exception of

one house only, which occupied higher ground. Next day he reached Cincinnati, which had suffered nothing from the flood. He landed at North Bend on the 2d February. Here he found the country so much overflowed as to leave him in doubt where to locate the city that was to be. For the present, however, North Bend was laid out and settled rapidly. Captain Kearsay, finding provisions scarce, leaves him with four men, on the 8th March, having done nothing toward building even a block-house; but Major Wyllys, at the Falls of Ohio, upon Symmes' application, dispatched Captain Luce with eighteen men to protect the settlement. Luce, within a week, had a substantial block-house finished.

Judge Symmes kept his surveying parties busily employed, and on the 9th of April, a party, who were out with John Mills, while leaving camp early, were fired on by a party of Indians, three or four in number. Messrs. Holman, of Kentucky, and Wells, of Delaware, were killed. Mills and three others made their escape.

On the 25th May, in the vicinity of North Bend, the Indians fired on a boat, in which were Captain Luce, Mills, the surveyor, and several soldiers and citizens. One of the soldiers, Runyan, from New Jersey, was killed, and four others, soldiers, wounded. Mills and one of the settlers were also wounded, but with the others recovered.

It is needless to follow the history of North Bend or Columbia as settlements any farther. The superior advantages of Cincinnati, safe from inundation, and shortly becoming sheltered from Indian depredations and murders, under the protection of Fort Washington, became now so apparent that no effort could arrest the progress of the place by rival enterprises. Cincinnati, as laid out, was covered with sycamore and sugar-trees upon the first or lower table, and beech and oak upon the second or upper table.

There are few events in western history more generally misunderstood, and more inaccurately recorded, than the campaign against the Indians, waged by Harmar and St. Clair. This was, doubtless, incident to the character of the times and of the country. That both Harmar and St. Clair should mistake the locations of the battles they fought, and that statements connected with these campaigns, founded on conjectures, should pass current for years in the community to such an extent as to confuse the truth of history, would not create surprise, if we reflect on the wilderness character of the untrodden west, the scattered state of the settlements

in the Miami country, the failure of communication between the respective parts, and the utter absence of mails and newspapers.

I commence with HARMAR's campaign. A page would hardly serve to point out the errors in dates, places, and facts generally, in print upon this subject. The best mode of correction is to compile the narrative anew, availing myself of unpublished manuscript notes of Capt. John Armstrong, who commanded a company of the United States regulars attached to Harmar's army during that campaign, and whose escape with life in the first battle was so remarkable.

The western frontiers had been for some years, say from 1782 to 1788, in a very disturbed state by reciprocal aggressions of Indians and whites. There does not appear, in the history of those days, however, any systematic and general movement of the Indians for the extirpation of the whites, as was alleged to be the object of their great confederacy of 1782, which, dividing into two parties, broke, one upon the upper Ohio settlements, the other on the various Kentucky stations, carrying massacre and captivity so extensively along their course. The irregular and precarious mode of living among the savages forbade the accomplishment of such design, if it had even been their settled purpose; the subsistence of themselves and families being principally derived from the chase, a species of provision which did not permit the laying up extensive and permanent stores, if even their improvident mode of living had permitted the effort. But when they found the settlers intrenching themselves in fort after fort, circumscribing their range and cutting them entirely off from their favorite hunting-grounds south of the Ohio, there can be no doubt that a determined hostility sprung up in the minds of the savage, which all the exertions of the American government failed to allay, and soon rendered it apparent that the two races could not live together in amity, while it was the policy of the one to reclaim the country from the hunter, and of the other to keep it a wilderness.

After treaty upon treaty had been made and broken—and the frontiers had been suffering through this whole period from the tomahawk and the scalping-knife—the government, then just going into operation, detached a force of three hundred and twenty regular troops, enlisted in New Jersey and Pennsylvania for the protection of the frontiers, and devolved the command on Josiah Harmar, who had borne arms as a colonel, with credit, during the late

revolutionary struggle. A force of eleven hundred and thirty-three drafted militia, from Pennsylvania and Kentucky, was also placed under his orders. The regulars consisted of two battalions, commanded respectively by Majors Wyllys and Doughty, and a company of artillery under Captain Ferguson with three brass pieces of ordnance. Colonel Hardin, of Kentucky, was in command of the militia, in which Colonels Trotter and Paul, Majors Hall and McMillan, held subordinate commands. The orders to General Harmar were to march on to the Indian towns adjacent to the lakes, and inflict on them such signal chastisement as should protect the settlements from future depredations.

The whole plan had been devised by Washington himself, who well understood the subject, having prior to the revolution, as is well known, learned much practically of the Indian character, as well as the condition of the west, although it is not easy to conceive why he should have selected such men as Harmar and St. Clair, who were destitute of the training he had himself acquired, and which could have been found on the frontiers of Pennsylvania and Kentucky, in many distinguished Indian fighters, ready for use. The force of circumstances probably biased his judgment, as it served to effect appointments equally exceptionable during the war of 1812, such as those of Hull, Dearborn, Bloomfield, and Chandler, men who had outlived their energies, if ever qualified practically for the weighty trust devolving on them.

On the 29th of December, 1789, General Harmar arrived at Cincinnati. He had been stationed for some months prior to this at the mouth of the Muskingum, waiting at that post for militia force and military supplies from the upper country, and the completion of Fort Washington, which Major Doughty with one hundred and forty-six men from Fort Harmar had been detached to construct. From this period to the 30th of September, 1790, he was employed in making everything ready for the expedition, and on that day all his preparations being made, he started with the regulars, the militia under Colonel Hardin having already set out.

The first day's advance was seven miles, and the encampment for the night was on a branch of Mill creek, course northeast. Eight miles more were made the second day, on a general course of northwest, the army encamping on another branch of Mill creek. On the third day a march of fifteen miles was made, the course generally north, and the encampment on the waters of Muddy

creek, a tributary of the Little Miami, within one mile of Colonel Hardin's command. The next morning, Colonel Hardin, with the militia, were overtaken and passed, and halting at Turtle creek, one mile further on, the whole army encamped for the night.

On the 14th of October the army reached and crossed the Little Miami, on a northeast course moved up it one mile to a branch called Sugar or Cæsar's creek, near Waynesville, where they encamped, having accomplished nine miles that day. Next day a march of ten miles, still on a northeast course, brought the army to Glade creek, near where Xenia now stands. On the 6th it reached Chillicothe, an old Indian village, now Oldtown, and crossed again the Little Miami, keeping a northeast course, making nine miles that day. Next day the troops crossed Mad river, then called the Pickaway fork of the Great Miami, and made nine miles; their course for the first time becoming west of north. On the 8th, pursuing a northwest course, they crossed Honey creek, and made seven miles more. On the next day, they followed the same course, and marching ten miles, encamped within two miles of the Great Miami. Next day the army crossed the Miami, keeping still a northwest course, and made ten miles more. On the 11th, by a course west of north, it passed the ruins of a French trading station, marked on Hutchens' map as the *Tawixtwes*, *Twigtwes* Encamped after making eleven miles. Next day the army kept a course west of northwest, near Loramic's creek, and across the head-waters of the Auglaize. Here they found the remains of a considerable village, some of the houses being still standing; fourteen miles made this day. On the 13th, marched ten miles, keeping west of northwest, and encamped, being joined by a reinforcement from Cincinnati, with ammunition. Next day, the 14th, Col. Hardin was detached with one company of regulars and six hundred militia, in advance of the main body, and being charged with the destruction of the towns in the forks of the Maumee. On the arrival of this advance party they found the towns abandoned by the Indians, and the principal one burnt; the main body marching on the 14th ten miles, and on the 15th eight more, both days on a northwest course. Next day made nine miles same course, and on the 17th crossing the Maumee river to the Indian village, formed a junction again with Hardin at the Omee village. This was the same town burnt and abandoned by the savages.

At this point of the narrative there is considerable obscurity with

names and places, which I must explore as I best can. The Indians had seven villages, it seems, clustering about the junction of the St. Mary's and St. Joseph rivers, which, as is well known, form the river Maumee. These were, first, the Miami village, so called after the tribe of that name, corruptly and by contraction *Omee*, from *Au Miami*, the designation given it by the French traders, who were here resident in great force. This lay in the fork of the St. Joseph and Maumee. Second, a village of the Miamis, of thirty houses, Ke Kiogue, now Fort Wayne, in the fork of the St. Mary's and Maumee. Third, Chillicothe, a name signifying "town," being a village of the Shawanees, down the Maumee, on its north bank, and of fifty-eight houses. Opposite this was another of the same tribe of eighteen houses. The Delawares had their villages, two on the St. Mary's, about three miles from its mouth and opposite each other, with forty-five houses together, and one other consisting of thirty-six houses, on the east side of the St. Joseph's, two or three miles from its mouth.

The day of Harmar's junction with Hardin, two Indians were discovered by a scouting party as they were crossing a prairie. The scouts pursued them and shot one; the other made his escape. A young man named Johnson, seeing the Indian was not dead, attempted to shoot him again, but his pistol not making fire, the Indian raised his rifle and shot Johnson through the body, which proved fatal. This night the Indians succeeded in driving through the lines between fifty and one hundred horses, and bore them off, to the no small mortification of the whites.

The same day, October 17th, was employed in searching in the hazel thickets for hidden effects. Much corn was found buried in the earth. On the evening of this day, Captain McClure and a Mr. McClary fell upon a stratagem peculiar to backwoodsmen. They conveyed a horse a short distance down the river, undiscovered, fettered him, unstrapped the bell, and concealed themselves with their rifles. An Indian, attracted by the sound of the bell, came cautiously up, and began to untie him, when McClure shot him. The report of the gun alarmed the camp, and brought many of the troops to the place. A young man, taken prisoner at Loramie's, was brought to see the Indian just killed, and pronounced him to be "Captain Punk—great man—Delaware chief."

The army burned all the houses at the different villages, and destroyed about twenty thousand bushels of corn, which they

discovered in various places where it had been hid by the Indians, a large quantity having been found buried in holes dug for that purpose. In this destruction a variety of property belonging to French traders was involved. On the 18th, the main body of the troops was moved to Chillicothe, the principal town of the Shawanese, General Harmar having previously detached a party of one hundred and eighty militia, and thirty regulars, in pursuit of the Indians, who appeared to have retired westward, across the St. Joseph, after the destruction, by themselves, of the Omee town, Captain John Armstrong commanding the regulars, and Colonel Trotter, of the Kentucky militia, the entire force. They found and cut off a few Indian stragglers, but did not overtake the main body, being recalled to camp by signal late in the evening. Next morning the same detachment was ordered out anew, and being placed under the command of Colonel Hardin, pursued the same route in search of the savages. Finding himself in their neighborhood, he detached Capt. Faulkner, of the Pennsylvania militia, to form on his left, which he did at such a distance as to render his company of no service in the approaching engagement. Hardin's command moved forward to what they discovered to be the encampment of the enemy, which was flanked by a morass on each side, as well as by one in front, which was crossed with great promptness by the troops, now reduced to less than two hundred, who, before they had time to form, received a galling and unexpected fire from a large body of savages. The militia immediately broke and fled, nor could all the exertions of the officers rally them; fifty-two of the dispersing being killed in a few minutes. The enemy pursued until Major Fountain, who had been sent to hunt up Faulkner and his company, returning with them, compelled them to retire, and the survivors of the detachment arrived safely in camp.

The regulars under Armstrong bore the brunt of this affair; one sergeant and twenty-one privates being killed on the battleground, and while endeavoring to maintain their position, were thrown in disorder by the militia running through their lines, flinging away their arms without even firing a shot. The Indians killed in this affair nearly one hundred men.

As regards the force of the savages, Captain Armstrong, who was under no temptation to underrate their number, speaks of them as about one hundred strong. Their strength has been stated,

but, as I think, without any data, by Marshall, in his *Life of Washington*, at seven hundred. The real strength of the Indians was in a well-chosen position, and in the cowardice of the militia, who formed, numerically, the principal force opposed to them. This destructive contest was fought near the spot where the Goshen State road now crosses Eel river, about twelve miles west of Fort Wayne. Captain Armstrong broke through the pursuing Indians, and plunged into the deepest of the morasses referred to, where he remained all night in water to his chin, with his head concealed by a tussock of high grass. Here he was compelled to listen to the nocturnal orgies of the Indians, dancing and yelling around the dead bodies of his brave soldiers. As day approached they retired to rest, and Armstrong, chilled to the last degree, extricated himself from the swamp, but found himself obliged to kindle a fire in a ravine, into which he crawled, having his tinder-box, watch, and compass still on his person. By the aid of the fire, he recovered his feeling and the use of his limbs, and at last reached the camp in safety.

For some years after, bayonets were found upon this spot in numbers, and bullets have been cut out of the neighboring trees in such quantities as to attest the desperate character of this engagement.

On the morning of the 19th, the main body of the army under General Harmar, having destroyed the Miami village, moved about two miles to a Shawanee village called Chillicothe, where, on the 20th, the General published the following order:

“*Camp at Chillicothe*, one of the Shawanee towns on }
the Omee [Maumee] river, Oct. 20, 1790. } ”

“The party under the command of Captain Strong is ordered to burn and destroy every house and wigwam in this village, together with all the corn, etc., which he can collect. A party of one hundred men (militia), properly officered, under command of Colonel Hardin, is to burn and destroy effectually, this afternoon, the Pickaway town, with all the corn, etc., which he can find in it and its vicinity.

“The cause of the detachment being worsted yesterday, was entirely owing to the shameful, cowardly conduct of the militia, who ran away and threw down their arms without firing scarcely a single gun.

“In returning to Fort Washington, if any officer or men shall presume to quit the ranks, or not to march in the form that they are ordered, the General will, most assuredly, order the artillery to fire on them. He hopes the check they received yesterday will make them, in future, obedient to orders.

“JOSIAH HARMAR, *Brig. Gen.*”

On the 21st, the army left Chillicothe on their return to Fort Washington, marching eight miles, when the scouts, who had been scouring the country, came in and reported that the Indians had re-occupied the “Omee” village, lying in the junction of the St. Joseph and Maumee rivers. Harmar, anxious to efface the stigma resting on the American arms in the affair of the 19th, detached Colonel Hardin, with orders to surprise the savages and bring on an engagement. The party under his orders consisted of three hundred militia, of which three companies were mounted men, with sixty regulars under command of Major Wyllys.

Colonel Hardin arrived at the Omee town early on the morning of the 22d. His force had been divided into two parties, the left division of which was to have formed down the St. Mary’s, and cross at the ford, after which they were to rest until daylight, and cross the St. Joseph, and commence an attack on the Indians in front who had encamped out, near the ruins of their town. The right division, under Hardin and Wyllys, were to proceed to “Harmar’s” ford, on the Maumee, where they were to remain until McMillan’s party had reached the river and commenced the attack, which was to be the signal for them to cross the Maumee and attack the Indians in the rear. Owing to the treachery or ignorance of the guides, however, McMillan’s force lost its way in the thickets through which they had to pass, and although traveling all night, did not reach the ford until daylight. As soon as the Indians, who had been encamped about the ruins of their town, discovered Hardin’s men, they began to rally for the fight; the alarm spreading and the Indians rushing in, Colonel Hardin, discovering that unless he crossed immediately he would be compelled to do it in the face of superior numbers, and expecting every moment to hear the report of McMillan’s men in his rear, gave the order to cross, and by the time two-thirds of his force had passed over the battle began. A severe engagement ensued; the desperation of the savages in the contest surpassed anything previously known,

and the greater part throwing down their arms, rushed on the bayonets, tomahawk in hand, thus rendering everything useless but the rifles of the militia, and carrying rapid destruction everywhere in their advance. While this attack was going on, the rifles of the remaining Indians were fatally employed picking out the officers. Majors Fountain and Wyllys, both valuable officers, fell directly after the battle began, the former pierced with eighteen bullets. Fifty-one of Wyllys' regulars shared his fate, and the other divisions also suffered severely in both killed and wounded.

Major McMillan came up with his force while the battle was raging, but could not turn its tide, although he succeeded in enabling the discomfited troops to retire, which they did in comparatively good order.

The militia behaved well on this memorable day, and received the thanks of General Harmar for their good conduct. What the carnage in this battle was, may be inferred from the return of one hundred and eighty killed and wounded, not more than half of those engaged in it escaping unhurt. There is no doubt as respects the second battle, whatever was the fact in the first, that the savages outnumbered as well as overpowered Hardin's forces, and the disparity was rendered still greater by the plan of night attack, which separated McMillan from the main body when his aid was most needed.

It is alleged in some narratives that the American troops were not defeated, as was proven by their regular retreat, a disorderly fight being the usual concomitant of defeat. But the fact that our troops were obliged to leave the remains of the brave soldiers who fell on that occasion, to become scalped and lie unburied and their bones bleaching on the ground until Wayne's visit, four years afterward, obtained them decent burial, discards the idea.

An affecting incident occurred at the place of crossing the river. A young Indian with his father and brother were crossing, when the ball of a white man passed through his body. He fell. The old man, seeing his boy fall, dropped his rifle, and attempted to raise his fallen son, in order to carry him beyond the reach of the white man, when the other son also fell by his side. He drew them both to the shore, then sat down between them, and, with fearless, Roman composure, awaited the approach of the pursuing foe, who came up and killed him also.

If there be any generalship in thus sending out detachment

after detachment to be cut up in detail, then General Harmar deserves that distinction. He put the best face on the matter which the nature of the case permitted, and issued the following orders on the 22d of October, the day of the second battle:

“*Camp*, eight miles from the ruins of the }
Maumee towns, 1790. }

“The General is exceedingly well pleased with the behavior of the militia in the action of this morning. They have laid very many of the enemy dead upon the spot. Although our loss is great, still it is inconsiderable in comparison to the slaughter among the savages. Every account agrees that upward of one hundred warriors fell in the battle; it is not more than man for man, and we can afford them two for one. The resolution and firm determined conduct of the militia this morning has effectually retrieved their character in the opinion of the General. He knows they can and will fight.”

It is easy to judge, by the preceding narrative and orders, what kind of fitness Harmar possessed for the service to which he was called. A general who encamps in the neighborhood of the enemy, with a force large enough to exterminate him, and contents himself with sending out detachments to be destroyed successively, where no adequate reason exists why the whole force should not have been brought into action, deserves not the name of a military man. Harmar kept two-thirds or three-fourths of his troops eight miles from the battle-ground inactive, and of as little service as if he had left them at Fort Washington. He appeared to be fully consoled for the loss of the brave officers and soldiers, who fell by the savage tomahawk and rifle, by the reflection expressed in the general orders, that the American troops could afford to lose twice as many men as the Indians. My unfavorable judgment on this subject is supported by that of the actors of that campaign who still survive.

The celebrated Indian chief, *Meshecanoque*, or Little Turtle, commanded the savages in both battles with Colonel Hardin and his troops, as he did afterward in St. Clair's defeat, besides bearing a conspicuous part in the battle with General Wayne at the Fallen Timbers.

Harmar returned by easy marches to Fort Washington, where he arrived on the 3d of November, and which he left soon after-

ward for Philadelphia, being succeeded in his military command by St. Clair. He resided in comparative obscurity for some years on the banks of the Schuylkill, and died about 1803. I was present at the funeral, which was conducted with great military pomp, his horse being dressed in mourning, and his sword and pistols laid upon his coffin, which was borne on a bier, hearses not being in use in those days.

Various attempts to negotiate with the Indians were resorted to; but having all failed, another body of troops, under the command of General St. Clair, was raised for the defense of the frontiers. St. Clair, after repairing to Lexington to obtain the assistance of the Kentucky militia, reached Cincinnati on the 15th May, 1791. His expedition against the Indians was protracted till late in the season, by the slowness with which recruits were raised; their delay in descending the Ohio, in consequence of low water; and, as it was alleged, an unpardonable negligence of the quarter-master and commissary departments. On the 7th of August, all the troops which had arrived, except the artificers and a small garrison for the fort, moved to Ludlow's station, six miles north of Cincinnati, in order to obtain forage from the woods, which was entirely consumed about Ft. Washington, and to await the arrival of the troops which were expected. The army, amounting to two thousand and three hundred non-commissioned officers and privates, moved from Ludlow's station, on the 17th of September, to the Great Miami, where they erected Fort Hamilton. Having placed a small garrison in the fort, the army then proceeded on its march, and, by the 12th of October, reached the site, where they built Fort Jefferson, about forty miles north of Fort Hamilton. These posts were intended as places of deposit and of security, either for convoys of provisions which might follow the army, or for the army itself, should any disaster befall it.

On the 14th, the army, consisting of seventeen hundred non-commissioned officers and privates, fit for duty, again commenced its march, with not more than three days' supply of flour. Many of the horses died for want of forage, and on the 31st, sixty of the Kentucky militia deserted in a body.

On the 3d of November, the army reached a creek fifty miles from the Miami villages, and encamped on a commanding piece of ground, in two lines, having the creek in front. The right wing, composed of Butler's, Clark's, and Patterson's battalions,

commanded by General Butler, formed the first line; the left, consisting of Bedinger's and Guthrie's battalions; and the second regiment, commanded by Col. Darke, formed the second line. The right flank was supposed to be secured by the creek, by a steep bank, and a small corps of troops. Some of their cavalry and their pickets covered the left flank. The militia were placed over the creek, about a quarter of a mile in advance, and encamped in the same order. At this place the General determined to throw up a slight work for the security of the baggage, and, when joined by Major Hamtramck, who had been detached to protect the convoys of provisions and prevent further desertion, to proceed immediately to the Miami villages. But both these designs were defeated. For the next morning, about half an hour before sunrise, an attack was made upon the militia, who very soon gave way, and, rushing into the camp through Major Butler's battalion, threw it into great confusion. The greatest exertions of the officers were ineffectual to restore order. The Indians pursued the flying militia, and attacked the right wing with great fury. The fire, however, of the first line for a few minutes checked them, but almost instantly a much heavier attack began upon that line, and shortly was extended to the second. The great weight of it was directed against the center of each, where the artillery was placed and from which the men were repeatedly driven with great slaughter. Finding no great effect from the fire, and confusion beginning to spread, from the great numbers falling in every quarter, it became necessary to try the effect of the bayonet. Accordingly Colonel Darke, with a part of the second line, was ordered to charge the left flank of the enemy, which he executed with great spirit. The Indians instantly gave way, and were driven back three or four hundred yards; but for want of a sufficient number of riflemen to pursue this advantage, Colonel Darke soon returned, and, in turn, was obliged to give way. At that moment the enemy entered the camp by the left flank, having pushed back the troops that were posted there. Several charges were then made with uniform success; but in all of them great numbers were killed, particularly the officers. Major-general Butler was dangerously wounded, and every officer of the second regiment, except three, fell. The artillery being silenced, and all their officers killed, except Captain Ford, who was badly wounded, and half the army fallen, it became necessary to retreat, which was done very precipitately. The

camp and artillery were necessarily abandoned. The Indians pursued the remnant of the army about four miles, whence, fortunately, they returned to the field to divide the spoils. The troops continued their retreat to Fort Jefferson, where they found Major Hamtramck with the first regiment. As this regiment was far from restoring the strength of the morning, it was determined not to attempt to retrieve the fortune of the day. Leaving the wounded at Fort Jefferson, the army continued its retreat to Fort Washington.

In this unfortunate battle, which lasted three hours and fourteen minutes, thirty-eight commissioned officers were killed upon the field, and five hundred and ninety-three non-commissioned officers and privates were killed and missing. The wounded amounted to two hundred and fourteen.

General St. Clair, on his arrival at Cincinnati, gave Major Ziegler the command of Fort Washington, and repaired to Philadelphia. Soon after Colonel Wilkinson succeeded Major Ziegler, and, with the regulars under his command, and about one hundred and seventy militia under Major Gano, marched to the field of battle and buried the dead. Great numbers of the slain were found upon the road near the battle-ground. After interring the dead in the best manner possible, Colonel Wilkinson returned to Cincinnati, with nearly one thousand stand of arms, and one piece of artillery, which the enemy had not taken from the field.

This year Cincinnati had little increase in its population. About one-half of the inhabitants were attached to the army, and many of them killed. The unfortunate event of the campaign not only alarmed the citizens for their safety, but so discouraged several of them from persevering to make their settlements, that they removed to Kentucky. No new manufactories were established, except a horse-mill for grinding corn.

On the 5th of March, 1792, Congress passed another law making further and more effectual provision for the protection of the frontiers of the United States. This act directed that the battalion of artillery should be completed according to its establishment; that both the two regiments of infantry in service should be filled up to the number of nine hundred and sixty; and that three additional regiments should be raised for a time not exceeding three years. A discretion, however, was given the President to raise the whole or part of the three regiments, and to discharge them

at pleasure. On the 7th of April, General St. Clair resigned the command of the army, and Anthony Wayne was appointed to succeed him.

The recruiting service was commenced and carried on with much activity. Commissioners were again sent to treat with the Indians, and, if possible, to bring them to an amicable negotiation; but they treated every offer with disdain, and cruelly massacred all but one of the commissioners. Such a flagrant outrage called upon the nation for redress, by the most exemplary exertion of its power.

The enemy frequently attacked convoys of provisions, and killed great numbers. The troops at Fort Jefferson, under the command of Captain Shaylor, and of Major Adair, who succeeded him, had several skirmishes with the enemy, in which many were slain.

About fifty persons were added, by emigration, this year, to the population of Cincinnati. Several cabins, three or four frames, and a Presbyterian house of worship were erected. This building stood on Main street, near the site of the present First Presbyterian church, and is still in existence, although removed to the northwest part of Cincinnati.

The troops which had been recruited for Wayne's army, assembled at Pittsburg during the summer and autumn of 1792, and encamped for the winter, on the Ohio, about twenty miles below that place. They descended the river the next spring—1793—under the command of General Wayne, and landed at Cincinnati. Here the General made an encampment, where he remained for two or three months, and then marched to the spot where he established Fort Greenville. The army remained at the fort during the winter, and until July following. In the fall of this year, soon after the army left Cincinnati, the small-pox broke out among the soldiers, in Fort Washington, and spread through the town with such malignity, that nearly one-third of the soldiers and citizens fell victims to its ravages.

In July, 1794, the army left Fort Greenville, and built Fort Adams, Fort Defiance, and Fort Deposit. At the latter place, the heavy baggage of the army was deposited, as a general engagement with the enemy was shortly expected. Accordingly, on the morning of the 20th of August, the army advanced to meet the enemy, and, after marching about four miles, the Indians, who

were secreted behind fallen trees and high grass, made a sudden attack upon the mounted volunteers under Major Price, who were compelled to retreat to the main body. The army was immediately formed in order of battle, having the Miami on the right, a thick wood on the left, and the fallen timber, among which the Indians were secreted, in front. The savages were formed in three lines, within supporting distance of each other, and extending nearly two miles at right angles with the river. It was soon discovered, from the weight of the enemy's fire, and the extent of their lines, that they were endeavoring to turn the left flank of the American army. The second line, therefore, was ordered to advance with trailed arms, and rouse the Indians from their coverts, at the point of the bayonet, and as soon as that was effected, to deliver a close fire upon their backs, followed by a brisk charge, so as not to give them time to load again. Major Campbell was ordered to turn the left flank of the enemy near the river. The orders of the commander-in-chief were promptly obeyed; and such was the impetuosity of the charge of the first line, that the enemy, consisting of Indians, Canadian militia, and volunteers, were driven from their coverts in so short a time, that notwithstanding every exertion was used by the second line, and Generals Scott, Todd, and Barbee, of the mounted volunteers, to gain their proper position, only part of each could get up to participate in the action; the enemy being driven, in the course of an hour, more than two miles. From the best accounts, the enemy amounted to two thousand, while the American troops actually engaged against them, were less than nine hundred. The savages, with their allies, abandoned themselves to flight, and left the Americans in quiet possession of the field of battle.

The army remained several days near the battle-ground, during which time they destroyed all the houses and corn-fields, for a considerable distance above and below Fort Miami. In this decisive battle, thirty-three American officers and privates were killed, and one hundred wounded. On the 28th, the army commenced its return to the Auglaize, by easy marches, destroying in its route all the villages and corn-fields within fifty miles of the river; from thence up the Miami to the junction of the St. Joseph and St. Mary's, where they erected Fort Wayne. They then proceeded to Loramie Stores, seventy miles southeast from Fort Wayne, and erected Fort Loramie, and marched from thence to Greenville,

which they reached about the 20th of November, and went into winter quarters.

In this battle the Indians received a chastisement so severe, and lost so many of their leading warriors, that they began to fear the American power, and to exhibit a disposition favorable to peace. This disposition was promptly reciprocated by our government, and accordingly, on the 3d of August, 1795, a treaty was made by General Anthony Wayne, at Fort Greenville, with all the warlike tribes, which put an end to their unprovoked, protracted, and sanguinary hostilities.

This event was hailed, by the infant settlements, as the era of peace and security. They now looked forward to an exemption from ravage, danger, and distress, and all the horrors of savage warfare. The return of peace gave them new ambition and new hopes. They removed from their forts into the adjacent country, selected farms, built cabins, and began to subdue the forest. They were soon joined by other emigrants, who, upon the news of peace, began to flock across the mountains in great numbers.

The whole Miami country, with the exception of Cincinnati and its vicinity, at the time of Wayne's treaty, was one interminable forest. In 1795, the town contained ninety-four cabins, ten frame houses, and about five hundred inhabitants.

Let us now turn from Indian warfare to the civil progress of the new settlement.

On the 2d of January, 1790, General St. Clair arrived at Fort Washington, in the purchase of Judge Symmes, and, on the 4th, established the county of Hamilton, with the following limits:—"Beginning on the bank of the Ohio river, at the confluence of the Little Miami river, and down the said Ohio river to the mouth of the Big Miami, and up said Miami to the Standing Stone forks or branch of said river; and thence with a line to be drawn due east to the Little Miami, and down said Little Miami river to the place of beginning."

On the same day, commissions for the County Courts of Common Pleas, and General Quarter Sessions of the Peace, for said county, were granted by the Governor. And William Goforth, William Wells, and William McMillan, were appointed Judges of the Court of Common Pleas, and Justices of the Court of General Quarter Sessions of the Peace. They were also appointed and commissioned as Justices of the Peace, and quorum in said court. Jacob Topping,

Benjamin Stites, and J. Stites Gano, were also appointed Justices of the Peace of the county. J. Browne, *Gent.*, was appointed and commissioned Sheriff during the Governor's pleasure. Israel Ludlow, Esq., Prothonotary to the Court of Common Pleas, and Clerk of the Court of General Quarter Sessions of the Peace of the county.

The Governor also made the following military appointments, viz.: Israel Ludlow, James Flinn, John Stites Gano, and Gershom Gard, Captains; Francis Kennedy, John Ferris, Luke Foster, and Brice Virgin, Lieutenants; Scott Traverse, Ephraim Kibby, Elijah Stites, and John Dunlap, Ensigns; all in the first regiment of militia of the county of Hamilton.

The civil and military powers were thus organized, and the government brought to act for the protection of the people.

On the 1st of December, Scott Traverse was appointed Lieutenant in place of Kennedy, resigned, and Robert Benham an Ensign, vice Traverse, promoted, both in the company of Capt. Ludlow.

On the 24th of May, 1791, Wm. Burnet was appointed Register of Deeds in said county.

On the 10th of December, 1791, Oliver Spencer was appointed Lieutenant-colonel, Brice Virgin a Captain, Daniel Griffin a Lieutenant, and John Bowman an Ensign.

On the 14th of December, George McCullum was appointed a Justice of the Peace.

On the 18th of February, 1792, the Secretary of the Territory, then at Cincinnati, and in the absence of Governor St. Clair, acting as Governor, issued the following proclamation:

"To all persons to whom these presents shall come greeting:—

"Whereas, It has been represented to me that it is necessary for the public interests, and the convenience of the inhabitants of the county of Hamilton, that a ferry should be established over the river Ohio, nearly opposite the mouth of Licking, in the Commonwealth of Virginia, and Mr. Robert Benham having requested permission to erect and keep said ferry;

"Now Know Ye, That, having duly considered of the said representation and request, I have thought it proper to grant the same, and by these presents do empower the said Robert Benham, of the county of Hamilton, to erect and keep a ferry over the Ohio river, from the landing place in the vicinity of his house lot, which is

nearly opposite the mouth of Licking, to both points of said *rivulet* upon the Virginia shore; and to ask, demand, recover, and receive as a compensation—

For every single person that he may transport over the said ferry,	6 cents.
For a man and horse,	18 “
For a wagon and team,	100 “
For horned cattle, per head,	18 “
For hogs, each,	6 “

until those rates shall be altered by law or future instructions from the Governor of this Territory.

“And he is hereby required to provide good and sufficient flats or boats for the purpose, and to give due attention to the same according to right and common usage, and to govern himself in the premises by all such laws as hereafter may be adopted for the regulation of ferries, as soon as such laws shall be published in the Territory.

“Given under my hand and seal, at Cincinnati, in the county of Hamilton, this eighteenth day of February, in the year of our Lord, one thousand seven hundred and ninety-two, and of the independence of the United States the sixteenth, and to continue in force during the pleasure of the Governor of the Territory.

“WINTHROP SARGENT.”

Having thus presented an outline history of Cincinnati during the first seven years of its existence, I propose to fill up the picture it forms by various notes and statements, taken down by myself and others, from the lips of the actors in the scenes they describe. I pursue this course as imparting a clearer light to the subject, than can be obtained from the continuous narrative just brought to its close. In doing this, as far as possible, I shall observe the order of time in which the events they refer to occurred. In some instances, it will be perceived, I have been obliged to include recollections of early events and circumstances which extend to a later period than the seven years to which I have limited my general narrative. This has been done to avoid impairing the entireness of the several statements.

Incidents Prior to the Settlement of Cincinnati.—In the year 1773, and about the beginning of June, three brothers, named James, George, and Robert McAfee, from Botetourt county,

Virginia, set out on an exploring tour for the west, with the intention of settling opposite the mouth of Licking, if they found the country such as it was described to them to be; if otherwise, they meant to push on for the waters of Salt river, where they had acquaintances from their own neighborhood in Virginia. They struck the river Ohio at Kanawha, where they procured canoes. An unprecedented rise had filled both rivers full to their banks, and the Ohio was still rising.

In this stage of water they made rapid progress, keeping the current of the river as a measure of safety from the savages, who, watching the approach of boats, frequently lay hid on the northern bank; and by the time they reached the mouth of Licking river, the Ohio had swelled to such a degree as to spread itself at this point—to use their own expression—“full from hill to hill.” This, in reference to the Cincinnati side, meant the abrupt bank which, at the distance of about one hundred feet south of Third street, followed the line of that street, nearly, from Broadway to John street, and even further west.

This, no doubt, was the great flood whose extreme height was marked at the time on a tree, below Fort Washington, and pointed out by the Indians as the greatest height to which the river had ever risen. As nearly as could be ascertained, it was twelve feet higher than the subsequent rises of 1832 and 1847, the greatest known since, on which occasions the Ohio did not overflow Covington or Newport.

The McAfee party, ignorant of the character of the country and the extraordinary nature of the freshet, concluded it would not answer to settle lands subject to such inundations, and, as they had contemplated, went into Kentucky, where, after first re-visiting Virginia, they finally settled. One of these brothers was the father of General Robert McAfee, author of a history of the war of 1812, and afterward Lieutenant-governor of Kentucky, and still later U. S. *chargé* to Bogota.

I have this statement from the late Dr. J. L. Wilson, who, in early life, was well acquainted with the parties.

General Wm. Lytle, who resided for many years in Cincinnati, and survived to March 8, 1831, emigrated, with his father, from Pennsylvania in 1780. They descended the Ohio with, doubtless, the largest fleet of boats and the greatest number of emigrants that ever left the upper country at one time—the boats numbering sixty-

three, and the fighting men alone of the party exceeding one thousand. At Maysville two or three boats, with a few families, landed and remained. The residue started off early on the morning of the 11th of April, and at 10 o'clock, the next day, two boats, which were ahead as pilots, signaled that an encampment of Indians had been formed on the northern or Indian side of the river, and opposite the mouth of Licking, just where Broadway intersects Front street. The shore, at that time, was a high bluff, rendering the savages clearly visible. Three boats, in a concerted order, landed half a mile above. It was arranged that half the fighting men should be in readiness to spring to the shore the moment the boats should touch it: they were then to form and march down to where the Indians were. The number of these hardly exceeded one hundred and fifty, while their opponents reached five hundred. Discovering a force so greatly superior moving rapidly upon them, they fled in so much haste and disorder, as to leave most of their movables behind. They followed the bank till they reached what is now called Mill creek, up the bottom of which they were pursued beyond the present site of Cumminsville. Several of the Indians were mounted, and they fled faster than their wearied pursuers could follow them on foot. The whites then returned to the boats and floated, without interruption, to Beargrass creek—Louisville.

John McCaddon, of Newark, O., in a letter to the editor of the American Pioneer, of May 16, 1842, states, that in May, 1780, he descended the Ohio. He left Louisville with the expedition of Colonel George Rogers Clark, which was raised in Kentucky, to chastise the Indians. "On our way up the river to where Cincinnati now stands," he states, "Captain Hugh McGary, a well-known Indian hunter and memorable for his participation in the unfortunate issue of the battle at the Blue Licks, in 1782, with a party had placed himself on the Indian side of the river, alleging that they lived better than we did, as they kept their hunters out to procure meat. The main body followed the Kentucky shore. One day, as we halted for dinner, McGary's men, as usual, halted opposite to us. When we were ready to march, they concluded to come over to us, as they discovered fresh Indian tracks. They had got but few yards from the shore, when they were fired on from the top of the bank. Colonel Clark's barge was instantly

filled with men, but before they were able to cross, they heard the Indians give the scalp halloo, and saw them disperse.

“At the place where Cincinnati now is, it was necessary to build a block-house, for the purpose of leaving some stores and some wounded men of McGary’s company. Although I did not cut a tree, or lift a log, I helped to build the first house ever built at Cincinnati, for I was at my post guarding the artificers who did the building.”

On the return, in 1782, of Logan’s second expedition against the Indian towns in Ohio, it was suggested by Colonel McCracken, of the light horse, and agreed to by the party, that as many as should survive that day—November 4—fifty years, should meet and exchange their final greeting and farewell to each other opposite the mouth of Licking river, that being the point where they first struck the Indian territory.

McCracken, the proposer of it, was the first one disabled from keeping the arrangement. He had received a wound in the arm from a rifle bullet, which, being neglected, produced mortification, and terminated his life on the litter which bore him, as the party descended Keys’ hill, at the head of Main street, just as the troops were entering the future Cincinnati. He was buried near the block-house, already referred to by John McCaddon, erected opposite the mouth of Licking, and breastworks were thrown over his grave to conceal the spot and save his scalp from the savages.

The proposed meeting—November 4, 1832—would doubtless have gathered the survivors of that pledge to the appointed meeting, but shortly before its arrival our city had been visited with that terrible pestilence, the cholera, and its virulence and extent magnified at a distance, indefinitely postponed the meeting of the old pioneers, and deprived the community of what would have been one of the most interesting incidents in western history.

The impression that John Cleves Symmes, and those who purchased from him, were the first settlers on the banks of the Miami, has extended so generally as to leave no doubt of the fact in the public mind. Yet, as far back as 1785, almost four years prior to the landing of Symmes, the whole Miami bottom had been explored as far up as Hamilton, and openings made at the best spots for the purpose of establishing pre-emption rights, by a party from Washington county, Pennsylvania. One of the company, John Hind-

man, was surviving as late as 1845, residing then a few miles from Hillsborough, Ohio. I add his narrative as given to me in his own words:

“My father, John Hindman, was a native and resident of Lancaster county, Penn., where I was born in 1760, and at the age of twenty left that neighborhood for Washington county, where I remained four years. In the month of March, 1785, I left the State of Pennsylvania, taking water at the mouth of Buffalo creek with a party, consisting of William West, John Simons, John Seft, and old Mr. Carlin, and their families. We reached Limestone point, now Maysville, in safety, where we laid by two weeks. The next landing we made was at the mouth of the Big Miami. We were the first company that landed at that place. The Indians had left two or three days before we landed. We found two Indians buried, as they were laid on the ground, a pen of poles built around them, and a new blanket spread over each one. The first we found was near the bank of the Ohio, and the second near the mouth of White river. Soon after we landed, the Ohio raised so as to overflow all the bottoms at the mouth of the Big Miami. We went over, therefore, to the Kentucky side, and cleared thirty or forty acres on a claim of a man by the name of Tanner, whose son was killed by the Indians, some time afterward, on a creek which now bears his name. Some time in May or June we started to go up the Big Miami, to make what we called improvements, so as to secure a portion of the lands, which we selected out of the best and broadest bottoms, between the mouth of the river and where Hamilton now stands. We started a north course and came to White Water, supposing it to be the Miami: we proceeded up the creek, but Joseph Robinson, who started from the mouth of the Miami with our party, and who knew something of the country from having been taken prisoner with Colonel Laughery and carried through it, giving it as his opinion that we were not at the main river, we made a raft and crossed the stream, having the misfortune to lose all our guns in the passage. We proceeded up to where Hamilton now is, and made improvements wherever we found bottoms finer than the rest, all the way down to the mouth of the Miami. I then went up the Ohio again to Buffalo, but returned the same fall, and found Generals Clark, Butler, and Parsons, at the mouth of the Big Miami, as commissioners to treat with the Indians. Major Finney was there also. I was in com-

pany with Symmes when he was engaged in taking the meanders of the Miami river at the time John Filson was killed by the Indians.”

In 1788, just previously to the settlement of Cincinnati, a party of hunters, five men in all, from the station near Georgetown, Ky., landed at the edge of Deer creek in two canoes. After hiding the canoes among the willows and weeds that grew thick and rank upon that little stream, they proceeded to ascend the creek along the left bank. At the distance of about one hundred and fifty yards from the mouth, in the shade of a branching elm, they halted for refreshment, and sat down to partake of the rude repast of the wilderness. The month was September, the day clear and warm, and the hour almost sunset. Having partaken of their evening meal, the party, at the suggestion of a man named Hall—one of their number—proposed, as a matter of safety and comfort, that they should go among the northern hills, and there encamp until the morning’s dawn. His proposition was acceded to, and the party started on their journey. Emerging from a thicket of iron weed, through which a deer-path was open, and into which the party walked single file, they entered one after another upon a grassy, weedless knob, which, being elevated some distance above the tops of the blossomed weeds around, had the appearance of a green island in the midst of a purple sea. The deer-path crossed the knob, and entered the weed thicket again on the northern side. The hunters did not pause for a moment, but entered the narrow avenue one after another.

As the last man was about to enter the path, he fell simultaneously with the crack of a rifle, discharged from among the weeds on the western slope. The whole party dashed into the thicket on either side and “squatted,” with rifles cocked, ready for any emergency. Quietly in this position they waited until nightfall—but everything around being still, and no further hostile demonstrations being made, one after another, they again ventured out into the path and started toward the opening, observing, however, the utmost caution.

Hall, a bold fellow, and connected by ties of kindred with the man who had been shot, whose name was Baxter, crawled quietly upon his hands and knees to the spot where his comrade had fallen, and found him dead, lying with his face downward, a bullet having entered his skull forward of the left temple. Baxter had

fallen some ten feet from the thicket's entrance, and Hall, after getting out of the thicket, *rolled* slowly to the side of the dead man, lest he should be observed by the skulking enemy, as, in an upright position, notwithstanding the gloom of nightfall, he would have been. He lay for several minutes by the side of the corpse analyzing, as it were, the sounds of the night, as if to detect in them the decoying tricks so common with the Indian. There was nothing, however, that, even to his practiced ear, indicated the presence of an enemy; and he ventured at length to stand erect. With rifle ready, and eye-ball strained to penetrate the gloom that hung like a marsh-mist upon the purple fields around, he stood for several seconds, and then gave a signal for the approach of his companions. The party cautiously approached the spot where Hall stood, and, after a moment's consultation in whispers, agreed to bury the unfortunate man, and then pursue their journey. Poor Baxter was carried to the bank of the river and silently interred under a beach, a few feet from the bluff, the grave being dug by the tomahawks of his late companions.

Having performed the last sad duties to the departed, the party prepared to leave, and had advanced, silently, a step or two, when they were startled by a sound upon the water. "A canoe!" whispered Hall. A suspicion flashed upon his mind, and he crawled to the spot where the canoes had been hidden, and found one of them gone.

Quick to decide, and fired with a spirit of vengeance, he proposed to his comrades that immediate pursuit be made. The proposition was agreed to, and, in less than five minutes, three of the hunters, armed and determined for their mission, were darting silently through the quiet waters in the direction of the sound which they had recently heard. About one hundred yards below the mouth of Licking, on the Kentucky side, they came within rifle-shot of the canoe, fired at the person who was paddling it, scarcely visible in the dim starlight, and a short exclamation of agony evidenced the certainty of the shot.

Paddling up alongside, the canoe was found to contain but a single person, and that an old Indian, writhing in death's agony, the blood gushing from his shaven brow. In the bottom of the canoe lay a rifle, and near it a pouch of parched corn, and a gourd about half filled with *whisky*. It was this Indian, evidently, who shot Baxter, and it seemed equally evident that he was alone upon

the war-path. The savage was scalped, and his body thrown into the river.

Hall and his party returned to the mouth of the creek, again hid the canoes, encamped near Baxter's grave for the night, and with the morning's dawn started upon their journey home.

Forty years afterward, some boys, digging for worms at the mouth of Deer creek, just below the bridge, discovered a skeleton with a bullet-hole in the skull, and the ball itself inside. It is supposed this was the remains of the unfortunate Baxter.

Difficulties and Conflicts with Indians.—Symmes appears to have got on with his Indian neighbors so well as to have had, for some time, little or no trouble in his settlement; but the grounds of collision, which sprang out of ungenerous advantages taken of the Indians by mercenary traders, and reprisals made by them in stealing horses, led to hostile demonstrations, more or less extensive, according to circumstances.

An instance or two will suffice to show the provocations given on this score. A trader, who had stopped at Columbia with his boat, sold a party of Indians whisky, which, before they had reached their camp, froze in the barrel. He also extorted from the party forty buck-skins, worth a dollar each at the time, for a rifle, compelling them to give a horse, worth forty more, into the bargain. A worthless gunsmith, who undertook to put a new chop, worth twenty cents, for the flint, to the cock of an Indian rifle, made the Indian leave two bucks for the work, before he would undertake it, and another Indian calling for it, was forced to pay two bucks more before the smith would give up the rifle.

As the Indians considered the whites one people, they held whoever they met with accountable for the misconduct of those by whom they had been injured, and reciprocal injuries soon separated the aborigines and the settlers.

In the early settlement of Columbia, that fine flat, known by the name of *Turkey Bottom*, which had been originally an Indian clearing, and planted for many years by the aborigines in corn, was leased from Major Stites by several of the settlers. Among them was an emigrant from New Jersey, named James Seward, who occupied one of the lots into which that bottom was divided. His dwelling was on the side of the hill near Columbia, and a path of about two miles led to the improvement referred to

Across this path and near the outside of the fence, toward Columbia, Abel Cook, another of the settlers, in fact, one of the party which landed first in that place, had felled a large hickory tree for the sake of the nuts. Two of Seward's sons, Obadiah and John, one almost twenty-one, and the other aged fifteen, attended to the cultivation of this field. One afternoon, in September, 1789, they were on their way to their clearing, and had just leaped over the hickory tree, when two Indians sprung on them from the tree-top, which had served them as a concealment, one sliding along each side of the tree, so as to intercept them, either in retreat or advance. The boys were unarmed, no danger being apprehended from the Indians at that period, Obadiah at once surrendered, and was fastened with twigs by his captors; but John, with a desperate effort to escape, made circuitously for home. The Indian on his side of the tree soon gained on him, however, and when within striking distance, hurled his tomahawk after him which brought him down, having cloven his skull just behind his right ear. As soon as overtaken he was again struck on the head, and scalped. He was then left, as supposed, dead, part of his brains oozing from his wounds, but was found by some of his neighbors and his own family next morning, and being lifted on the back of John Clawson, the stoutest of the party, was carried home.

When found, although thus shockingly mangled, he had possessed sufficient vitality and vigor to crawl round in a regular circle, although unable to lift his head, making a deep track with his hands and knees and feet, doubtless unconscious of what he was doing. When taken home, everything which the kindness and care of friends could suggest was done for his relief and cure. But, after lingering thirty-nine days, he died, mortification having taken place. During this interval, he became not only sensible, but cheerful even, and, in some measure, able to give an account of what had occurred up to the time the fatal blow had been inflicted.

Of Obadiah nothing was heard for some time, when the following incident was the means of conveying to the unhappy parents tidings of his fate: A hired man, belonging to John Phillips, named Ned Larkins, had been, on the same day, engaged topping and blading corn for fodder, when he felt himself grasped by the arm by an Indian, while another, at the opposite side, brandished his tomahawk over him. He screamed with affright, but was soon awed into silence by threats made from his captors—partly in

signs, and partly in broken English—that they would finish him on the spot, if he did not keep quiet. He was then tied and taken away. The three pushed forward on an Indian trail till they struck a broad road leading from Pittsburg to Detroit, to which place they took Larkins, and sold him to a Frenchman—a trader—for a trifle. His new master soon got tired of him, and set him at liberty to make his way, with a number of whites, who had been redeemed from captivity, and were just setting out for Pittsburg, to which place he accompanied the party. Once at Pittsburg, he made his way down to Columbia, without delay or difficulty. His return was the first opportunity of learning what had become of the elder Seward.

Obadiah had been directed to drive the horses that carried the plunder of his captors on pack-saddles. He was of course in advance of the Indians. After they reached the road from Pittsburg, referred to, they had fallen in with another party of Indians from that place, and a general carouse of the savages ensued, after which they all set forward. A short distance further the road forked, and Obadiah having taken the wrong fork, one of his captors, doubtless under the influence of whisky, sent a ball after him which brought him lifeless to the ground. His head was cut off, part of the skin of the breast adhering to it, and placed on a stake, which was driven alongside of the road. Here it was seen and instantly recognized by Larkins, who was intimate with young Seward. The man who killed him alleged that he did not know that his gun was loaded, and only fired to frighten him; but the subsequent barbarity renders this improbable.

Obadiah had long felt a presentiment that he would be killed by Indians, and said repeatedly, that, as soon as he was his own master—meaning when he should become of age—he would return to New Jersey.

Seward, the father, never recovered this blow to his domestic happiness. He removed to the neighborhood of Springdale, in this county, where he lost another son by the fall of a tree, and died only a few years since.

Thomas Irwin, who resided at Blue Ball, Butler co., O., in 1845, and if yet living, probably still a resident of that place, writes me: I forward you, as I promised, my recollections of the incidents connected with Harmar's campaign, which fell under my observation, or in which I bore a part.

“General Harmar marched his army from Fort Washington, if I recollect right, the last week of September, 1790. His expedition was designed against the Indian towns on the St. Joseph, or Maumee, near where Fort Wayne was afterward built. The army followed the trace made by General George Rogers Clark, with the Kentucky troops, in October, 1782, as far as the Pickaway towns, on both sides of the Great Miami, which were destroyed by him on that visit. Thence we had a tolerable Indian trace to where there had been a large trading establishment, *St. Mary's*, from which we had a good Indian trace to our final object, which was sixty-four miles from there into the wilderness.

“There were, perhaps, one hundred and thirty of the Kentucky militia mounted and armed: one-third of that force with swords and pistols, the balance with rifles. They were remarkably useful in that campaign, being found active and efficient in hunting up pack-horses or beef cattle, which were apt to stray off after night, scouring the woods for the purpose, and sometimes rousing from their concealment Indians who were watching our movements. On account of these services they were exempt from camp duty at night.

“When the army got within thirty or forty miles of the Indian towns for which we were marching, there were ten or twelve of these mounted men sent out in search of some pack-horses that had been lost over night. They started a smart young Indian, took him prisoner, and brought him into camp, where he was examined by two of the Kentuckians, who understood the Indian language. He spoke freely, and told all he knew respecting the movements of his people, saying that they had at first intended to make a stand and defend their town; but after holding council, gave up the idea, and had moved their families and property down the river, intending to burn their wigwams. When the army arrived, they found all his statements true.

“Two days after the army reached the Indian towns, orders were given to draft four hundred men from the different companies, with a view to send them out and see what discoveries they could make respecting the enemy. They were to draw two days' provisions, and be out over night.

“About twenty of the mounted men, and perhaps half a dozen footmen, volunteered to go along. I was one of these last. The detachment crossed the St. Joseph where the centre of the town

stood, struck a trace on the west bank that led a west course, and followed it within one mile of the river. On the route, the mounted men started two Indians, and shot them both; lost one man ourselves. Pursued the trace till sunset, and found evident signs, though much scattered, of Indians. None of them appeared fresh. About sunset the six pounder in camp was fired. Colonel Trotter, of Lexington, Ky., who had the command of the detachment, concluded this was a signal for our recall, and, counter-marching, we got into camp a little after dark. The next day's tour we were placed under the command of Colonel Hardin. We crossed the river where we did the day before, and struck a good Indian trace a short distance from the river, directly north; after following it four or five miles, we found considerable of fresh signs of savages. Two or three Indian dogs got in among the troops, which disappeared again shortly, discovering that they were not among their masters.

“The Colonel ordered a halt, directing the different companies to station themselves on the right and left of the trace, and keep a sharp look-out. Our company went round the point of a brushy grove, which threw us out of sight of the trace, though not far from it. The Colonel sent Major Fountain, with eight or ten mounted men, to reconnoitre. After traveling a short distance on that trace, they came to where it crossed a small stream of water, which, being muddy on each side, pointed out plainly the fresh tracks of Indians, who had been making a hasty retreat, with a view of drawing the detachment into an ambuscade. The Major returned, and reported accordingly. Colonel Hardin was so keen for pursuit, that he started off with the principal part of the troops in such a hurry, he forgot to give us any orders. After waiting awhile, we became impatient, struck the trace, and, finding they were gone, followed on. We had not gone far, however, until we met Major Fountain and Captain Faulkner; having explained that we had been directed to halt until we should get orders to march, we pressed forward to overtake the main body of our comrades.

“In a short time we met two of the mounted men at full speed, each having a wounded man behind him. ‘Retreat!’ said they, ‘for God’s sake! There are Indians enough to eat us all up.’ We proceeded on, however, till we had gained a high swell of ground, when we saw our troops putting back upon the trace—the Indians in pursuit, yelling and shooting. We halted, formed a line

across the trace, and treed, with a view to give them a shot. They came within seventy or eighty yards of us, when they halted instantly. I expect the reason was, Colonel Hardin, Hall, Fountain, and four or five others, were on horseback close by where we were. We remained there until the retreating troops had all passed by, none of whom halted with us except the men on horseback. We covered their retreat, and marched into camp a short time after dark, under the direction of Colonels Hardin and Hall. The six pounder was discharged every hour till daylight, as a signal for the benefit of the stragglers, of which several came in that night.

“ Having been acquainted with Colonel Hall in Bourbon county, Kentucky, and knowing he was near the front, I went to his tent next morning, to learn what had been the movements in front on the day before. He stated that the trace passed through a narrow prairie, with a heavy growth of timber and underbrush on each side. At the far end it entered into a thick growth of timber. At this spot, within a few feet of the trace, the enemy had kindled up a fire. Here the advance halted as soon as they came up, and just at this moment the Indians rose from their coverts on the prairie sides, and poured in a deadly fire so suddenly and unexpectedly, that it threw our troops into a confusion, from which they could not be rallied, and it was on their retreat, we being within a short distance of that prairie path, that we protected their right about movement, as I have already stated.

“ The army lay some days encamped, after Hardin’s detachment had been thus defeated, when preparations were made for our return to Fort Washington, after destroying all the property of the enemy within reach. The first day the army marched about five miles, leaving a party of three or four mounted men, with an officer, on a commanding piece of ground, to observe if the Indians should make their appearance and offer signs of pursuit. About two hours after the army had disappeared, the Indians began to come in by droves, hunting for hid provisions, as they had large quantities put up in that way. On learning this late in the evening, from the party left behind to watch their movements, Colonel Hardin was keen to have another brush with the savages. A draft of four hundred men was accordingly made and placed under his command, in the calculation to surprise them before daylight. The detachment marched back to the post where this officer, with his party, had been stationed, when, taking to the left hand, Colonel

Hardin crossed the St. Mary's near its junction with the St. Joseph's, and pushed forward up the west bank of that river toward the Indian town built there. He was followed by Majors Fountain, McMillan, and Wyllys. Harmar's trace crossed the Maumee river at Harmar's ford. As soon as the river was passed, the town was in sight. The day was just dawning as the troops moved on, Major Fountain, with a few mounted men, in front. As they turned the point of a hazel thicket, and at a few rods distance, fifteen or twenty Indians were discovered around a fire. The Major charged right in among them, fired both his pistols, and then drew his sword; but ten or twelve of the savages, at the time not more than as many feet off, discharged their rifles at him. One of the soldiers, George Adams by name, being close by, fired on them and received four or five flesh wounds by a volley in return. Wyllys and McMillan, with a small party of regulars, finally succeeded in drawing them into the river. Fountain, although wounded in several places, and surviving but a few minutes, yet hung to his saddle. Our men took him off, and buried him under the side of a log, or under a bank, and Adams rode the horse in. When Wyllys, with the regulars, was driving the savages into the river, Hardin met them on the other side, but was compelled, by inferiority of force, to retire.

“There were many Indians killed in the skirmish of the second day; and if we had had a few more troops detached from Harmar's command, of those who were not wanted in camp, the enemy would have received the worst drubbing they ever got from the whites; as it was, they lost more than they ever lost before in any one of our western battles. Majors Fountain and Wyllys were both killed, with other officers of inferior rank. Major McMillan collected the scattering troops and remained on the ground until all the Indians had disappeared, and then marched into camp, which he reached before sunset.

“Next morning General Harmar sent Captains Wells and Gaines, both of the Kentucky troops, as an express to Fort Washington. When they reached the bottoms of the Great Miami, at a short turn of the trace they were following, they met five Indians very unexpectedly. On the instant, Gaines wheeled to the left and Wells to the right, and by the promptness of the movement saved their lives. They both made a wide circuit,—Wells got to the mouth of the Miami, and Gaines struck the river where Ripley

now stands. The army, however, reached Fort Washington before either Gaines or Wells. * * * * *

“The Indian prisoner, to whom I referred in the early part of this letter, was taken to Fort Washington, although afterward sent home.”

John Bush, who resided in Boone county, Ky., as late as 1845, stated to me that he volunteered in the expedition of Gen. Harmar, in 1790, crossed the river at Cincinnati, marched to Fort Wayne, and went with the troops engaged in both days' battles with the Indians. On the first day he commanded an advanced guard of twenty men, with orders by Major Fountain to charge any body of Indians the spies might discover and fire upon. He asked the Major what he was to do if he came upon a *large body* of Indians? Fountain demanded to know if he was afraid? “No, sir, I am not afraid; but wish to know my duty,” was the reply. “Well, sir, if you fall upon ten thousand Indians, it is your duty to charge through them and form at their backs.” The detachment, as is known, were drawn into ambuscade and defeated, and about one-third, including many of the best spies and soldiers, were killed.

After the Indian town had been burned, Harmar's army commenced its usual march for the settlement, and encamped about six miles off. Colonel Hardin solicited permission to return to the town with another detachment and surprise the Indians, which being granted, volunteers were again called for, excusing those who had been in the first day's engagement. Major Fountain went to Bush and requested him to go. He agreed, provided they would get him a very fine horse, belonging to one Nelson, which being procured, he marched with Harmar and reached the town just before day. The detachment divided into two parties, Bush with that of Colonels Hall, McMullen, and Fountain. When it became light enough to see, a number of Indians were discovered some fifty or a hundred yards in advance. Fountain, as Bush thinks, without giving the word *charge*, in his eagerness, charged alone, and was shot, and fell from his horse. The Lieutenant of the troops advanced and ordered the charge, but was followed by only four men, Bush, Titus Mershon, and two named Moore. When reaching the place where Fountain lay, they were fired on by the Indians, and all wounded but the Lieutenant. Bush had his sword knocked out of his hand, and a ball grazed his cheek and cut off part of his queue. They then returned; but a reinforcement coming up, the

Indians gave way, and many of them were killed in crossing the St. Joseph. They were followed by the horsemen. On reaching the opposite bank, Bush saw an Indian leave the rest, which he followed and took prisoner: some one of the troop coming up, he cut him down beside Bush's horse. Bush cursed the fellow for a coward, and turned his horse and rode toward the firing that had commenced under Colonels Hardin and Wyllys. Upon coming in sight, he found himself in the rear of the Indians, and Hardin's troops firing directly toward him. He then tried to turn them on the right flank; but, in ascending a small rise, he met fifty or sixty Indians, who halted and fired at him, just as he turned his horse, the ball passing through his coat. He then attempted to pass on the left, but found the Indian flank reached to the river. His next effort was to retreat to the rear, where he soon met several horsemen, who told him there was a body of Indian horsemen approaching in that direction; they having, as he since supposed, become alarmed at seeing some of their own men. He now determined to charge through the Indian lines and join Hardin, which he accomplished in safety, followed by his few associates. On passing the Indian town, he saw a very large Indian behind a tree, and prepared to strike him with his sword; but the Indian, turning the tree just at the moment, saved himself. Hardin's men were beginning to give way, but seeing the men charge through the Indians, they rallied and fired again, but were soon compelled to retreat. During the retreat, the horsemen were directed to ride as far as they could with safety to the rear and bring up the men that were giving out.

At one time during this dangerous employment, Bush got mired in a swamp, with a man behind him. He made the man get off, but not being able to extricate the horse, he got off himself, and remained trying to get him out till two Indians came up and took the man prisoner. He then sprang out of the swamp and was fired at by the Indians, which alarmed the horse so that he cleared the swamp and was regained and mounted.

On his return to Fort Washington, he crossed the river to the Kentucky side, now Covington, and passed the night there. In the course of the night, his horse was stolen. Next morning he recrossed the river, reported his horse as lost, returned and walked to Georgetown the same day.

The statement of John Hindman—page 49—brought out Judge Matson, of North Bend, who wrote me: Your friend, *John Hindman*, is in error, alleging that Tanner's creek, Indiana, derived its name from young Tanner being killed by the Indians on its waters. Tanner was not killed at all, although doubtless believed to be by the neighborhood, at the time Hindman left the Great Miami, which was soon after Tanner had been carried away by the savages. I knew the whole family well—the old man Tanner being the first clergyman I ever heard preach at North Bend, and for some time the only one.

Tanner, the father, owned the land where Petersburg, Ky., is now built, and resided on it, being about three miles below the Miami, and opposite the creek which derived its name as the station also did, from Tanner, who was the principal man settled there. Hogan, Tanner's son-in-law, who lived with him, and was a first-rate hunter, gave name to the creek just above Aurora.

In May, 1790, *John Tanner*, the youngest boy, and nine years of age, was out in the woods gathering walnuts, which had been lying over from the previous season among the leaves, when he was made prisoner by a party of Indians, and carried to the *Shawanese* towns, in the first place, and afterward taken away to the head waters of the Mississippi. Nothing was heard of him, by his friends, for twenty-four years, except that in 1791, the next year, a party of Indians, composed partly of the same individuals, prowling in the neighborhood, captured *Edward Tanner*, a brother of John, and nearly fifteen years old. After traveling two days' journey in the wilderness, the boy appearing contented, and supposing that he would be discouraged from attempting to make his escape, at such a distance from home, his captors relaxed their vigilance, and the boy, watching his opportunity, regained his liberty, being obliged, in the hurry, to leave his hat, which was of undyed wool, behind, and which the Indians carried to their home. They had told him on the way out, that they had carried a boy off from the same place the year before. John Tanner recognized the hat, as soon as he saw it, as his brother's.

Nothing was known of John, as already stated, for many years, although Edward attended the various treaties for successive years, and traveled to distant points, even West of the Mississippi. The Indians with whom John was domesticated, had been for years settled on the Upper Mississippi, and traded with the Hudson Bay

Company, which of course baffled the search thus made. In 1798, the Tanner family left Kentucky for *New Madrid*, where old Tanner died, after marrying, in the mean time, a third wife.

In 1817, after the close of the war, John Tanner, who by this time had married an Indian wife, and had six children by her, with a view of learning something about his relations, and expecting to receive a share of the family property, came down the chain of lakes to Detroit, and there reported himself to Governor Cass, as an Indian captive, taken from opposite the mouth of Big Miami, in Kentucky, in 1790. He gave the family name as Taylor, which was as near as he could recollect or probably articulate it. Cass gave notice of the fact through the medium of the press, adding that the individual would be present at a treaty to be held with the Indians at St. Mary's, formerly *Girty's town*, and now the county-seat of Mercer county, O. The Tanner family had removed years since to New Madrid, and, with the exception of Edward Tanner, was composed of the widow and children, born of the later marriages, since John's capture. But a nephew by marriage of the young men, named Merritt, who lived where *Rising Sun* has since been built, having seen the notice, was firmly persuaded that the individual, although improperly named, was his long lost and long sought uncle Tanner, and under that conviction went to the treaty ground, and found the case as he supposed it to be. The two started off for the Miami region together. Tanner, although in feeble health, having fever and ague at the time, was with difficulty persuaded to sleep in the cabins which they found on the route, preferring to camp out; and to gratify him one fine night, Merritt, having selected a suitable spot for repose, went to a neighboring house, got coals, and attempted to kindle a fire, which, as the leaves and brush were wet, burned with difficulty. Tanner, who had become thoroughly Indian during his long residence among them, now got up in a pet, kicked the fire to pieces, and, flashing powder from his rifle, made his own fire, remarking, "White man's fire, *no good*. Indian fire, *good!*"

They stopped all night at my house, on their way to the lower country, and there I obtained these particulars. When they reached New Madrid, it so happened that Edward was out on one of his excursions to hunt up his brother, and John, after waiting a few days, became impatient to get back, and left for home, without even seeing his brother, who had sought him so anxiously for years.

Soon after reaching his home, Tanner had a quarrel with an Indian, and was badly shot, but, after lingering a great while, recovered so far as to set out with Colonel Long and a party who were on their way to Detroit. His strength gave way on the journey, and they were obliged to leave him on the road. He finally recovered, and was employed by the United States authorities as interpreter among the Indians at Sault St. Marie, at the outlet of Lake Superior, which is the last I heard of him.

Tanner's life was published years ago, but I never saw a copy of it, and do not know whether it is now extant.

Early in the month of January, 1791, Colonel John S. Wallace, one of our early settlers, accompanied *Abner Hunt*, who was a surveyor, with two other persons, *Sloan* and *Cunningham*, on surveys on the west bank of the Great Miami. On the night of the 7th, they encamped there. Next morning, after they had been roasting venison, on which they breakfasted, they set out to explore the Miami bottoms above, where the Colerain settlement, or station, was located. They had hardly left their camp seventy yards behind, when they were beset by the savages on their rear, who fired a volley of eight or ten guns. Cunningham was killed on the spot. Hunt, having been thrown from his horse, was made a prisoner before he could recover, and Sloan, although shot through the body, kept his seat and made his escape, accompanied by Hunt's loose horse. Two of the Indians pursued Wallace more than a mile and a half, but, owing to his uncommon activity, he made out to overtake Sloan with the spare horse, which he mounted, and succeeded in crossing the Miami in Sloan's company. In his flight on foot, he was twice shot at, but without effect. His leggings had been getting loose, and at the moment of the first shot, he tripped and fell. Supposing him struck by the bullet, the Indians raised a shout, *Wah! hoo!* calculating to a certainty on his scalp; but, hastily tying his leggings, he resumed his flight and effected his escape. After crossing the Miami, Sloan complained of faintness from his wound, when Wallace advised him to thrust part of his shirt into the bullet hole to stop the flow of blood. Leaving the river, they directed their course to Cincinnati, which they reached in safety the same evening.

In the month of May, 1791, Wallace, with his father and a lad, were hoeing corn in a lot immediately north of where the Cincinnati Hospital now stands; and at the same time two men, named

Scott and *Shepherd*, were engaged plowing corn near what is now the corner of Western Row and Clinton streets. They had drawn a few furrows across the lot, when five or six Indians jumped the fence, raised the yell, and gave chase to the plowmen, but to no effect. On hearing the yell, Wallace snatched up his rifle, which lay in the row before him, directing those with him to make their escape to town as fast as possible. On stepping cautiously into the adjacent lot, he discovered an Indian, about eighty yards from him, about to enter the bushes. He shot at him, probably without effect, as he left the ground in haste. At the same instant he saw two Indians riding the plow-horses away at full speed. The party of savages left eight blankets and blanket capots behind, together with a leg of bear meat, a horn full of powder, and some trifling articles. The alarm was given, and eleven of the best woodsmen and hunters were started on foot in pursuit, followed by eleven others on horse, having all the horses in the place, each man supplied with some pone and venison wrapped in his blanket for both horsemen and footmen. About sunset they encountered a severe thunder-storm, accompanied with heavy rain. By the time it became dark, the rear party overtook the advance on foot, and, making their horses fast to the trees, encamped for the night. In the morning they took the trail, and found that the Indians had lain all night in a prickly-ash thicket, a short distance in advance, where they had eaten a part of a fawn raw, and left the rest. The enemy was pursued to the river, at a point where the Indians had crossed, just above where the town of Hamilton now stands. Owing to the tremendous rains which had fallen, the river was bank full, and the pursuing party were obliged to return home.

Shepherd and Scott were chased into Cincinnati as far as the present corner of Fifth and Race streets.

Colonel John Riddle, also an old pioneer, gave me in relation to some incidents connected with these occurrences, this statement: In the spring of 1791, William Harris, who was my wife's father, went, in company with me, to clear ground for a cornfield. It comprehended in its bounds the ground where now stands Byington's rolling mill, on Plum street, south of the corporation line. We had a small dog with us. One day, the 21st of May, we had been to work as usual, and had sat down to rest at the foot of a large tree, when, hearing a slight rustling through the spice-wood

bushes, I told Harris there were Indians at hand. He laughed at the idea. I hissed the dog on, who bounded into the bushes, barking at a great rate, and returned in a short time with his tail and ears down, and manifesting other symptoms of fear. We then sprung up and made a circuit through the bushes, so as to get between the Indians, if there were such there, and the town. In this way we had just regained the path, several rods below where we were, when we heard them crossing it near the spot we had left. We hurried into Cincinnati as fast as possible, and found soon after that Benjamin Van Cleve had been shot at, and Joseph Cutter, who was at work with him, clearing an out-lot, captured and carried off by the Indians. Cutter was never more heard of. The lot they were working in cornered with mine near a spot in the Miami canal, which is crossed by a high bridge, opposite Mason street.

A party from Cincinnati made immediate pursuit, with a dog, which made out the trace. Cutter had lost one of his shoes, so that his tracks could be readily observed in the marshy bottoms along the watercourse. The Indians were followed upon full run until dark, when the pursuit was given up. It was afterward ascertained that the savages had halted two miles further out, and encamped for the night. The pursuit was resumed next day, but to no purpose.

On the 1st June, of the same year, Van Cleve, having returned to the occupation of his out-lot, and working there, in company with two others, the Indians again made their appearance. The party took to flight, making their way to the settled parts of Cincinnati. Two of them made their escape, but Van Cleve, who had passed them in the race, and at the time was three hundred yards or more in advance, was intercepted at a fallen tree top, by an Indian, who sprung on him from behind the ambuscade. Van Cleve was seen to throw the savage, and the Indian to plunge a knife twice or thrice into the side of his antagonist, but, perceiving the approach of the whites, he hastily stripped off the scalp and made his escape to his party in the rear. When the two fugitives got up, Van Cleve was entirely lifeless.

The same day, a party from the garrison, consisting of Sergeant Hahn, a Corporal, and a young man who lived in Colerain, started to Dunlap's station on the Miami. They were engaged in driving a cow out to that post, and had imprudently fastened a beil to her

neck. On his way the Sergeant called on me and paid me three dollars, on account of a blacksmithing bill he owed for some time. I said, "You had better pay me more: the Indians will get the rest." "Never fear," was his careless reply. In the course of two hours afterward, he had a bullet put through him, his scalp taken, and the residue of his money carried off.

These were the last instances in which a savage rifle was fired within the present limits of Cincinnati, later depredations being connected with the bow and arrow, which enabled them to destroy cattle, while prowling through our streets by night, without creating an alarm. On one of these visits they shot an arrow, with a stone head, into an ox with such force that it went entirely through the carcase. Stealing horses from this time until Wayne arrived, in 1793, constituted the principal injury inflicted by our red brethren upon their white neighbors in Cincinnati.

In the month of August, 1791, a man named Fuller, with his son William, a lad of sixteen years of age, or thereabouts, was in the employ of John Matson, sr., and in that capacity the Fullers accompanied Matson, a brother of his, and a neighbor, Geo. Cullum, to the Big Miami, to build a fish-dam in its waters, at a place about two miles from North Bend. Old Fuller sent his son, toward night, to take the cows home, and for several days the neighborhood turned out to hunt him up, suspecting that he had been taken by the Indians. No trace of him was however obtained, nor anything heard of him for nearly four years, when Wayne's treaty afforded an opportunity for those who had relatives captured by the Indians, to ascertain their fate. Old Fuller, under the hope of learning something respecting his son, accompanied a party to Fort Greenville, and spent a week making inquiry among the Indians present, but to no purpose. One day, being in conversation with *Christopher Miller*, one of Wayne's spies, and who had been taken captive himself, in early years, and brought up among the Indians, he was describing his son's personal appearance, as being heavy built, cross-eyed, and a little lame, when Miller exclaimed, "I can tell you where he is." He then went on to say that he had himself made him a prisoner, that he knew where he was, and if he would come back in three weeks, he would produce him there. Fuller returned accordingly, and obtained his son, who accompanied him home.

The statement of Miller was, that he was out as a scout on the Miami, with two Indians, and the youth, being intent on hunting the cows, had got quite near before he observed Miller. When he saw him, he attempted to run, fearing that Miller might be an Indian. Miller called out, "Don't run." The boy spoke up and said, "Who are you?" "My name is Miller." Young Fuller supposed it to be a Thomas Miller, at North Bend, and stood still, waiting the other's approach. As it was now dusk, it was not until Miller had got nearly up to him, that he perceived his mistake, and endeavored to make his escape. Being somewhat lame, he was, however, soon overtaken and captured. Miller then gave a whistle on his powder charger, when two Indians appeared. They hurried the boy across the Miami, the waters of which were quite low at the time. After traveling some distance, they encamped for the rest of the night. In the morning, the Indians discovering that Fuller was lame, and defective in his eyes, were for tomahawking him, alleging they could never make a good Indian of him; but Miller objected, saying he was his captive. He was taken to one of the Indian towns, where he remained until the treaty of 1795.

He had been a bad boy hitherto, and his residence among the savages made no improvement in him. He did no good after getting home, and, associating with a gang of horse thieves, lost his life, not long after, in a marauding expedition made by a party into Kentucky.

I take the following memoranda from a book of field-notes, kept by John Dunlop, who appears to have been engaged in the surveys of Symmes' purchase, as early as January 8, 1789:

"Memorandums of sundry circumstances in the Miami purchase, from the 1st day of May, 1789.

"May 21st.—*Ensign Luse*, with eight soldiers, and some citizens, going up from North Bend to a place called South Bend, was fired on by a party of Indians, the tribe they belonged to we never could learn. There were six soldiers killed and wounded, of which one died on the spot; another died of his wound, after going to the falls of the Ohio for the doctor. There was a young man, named *John Mills*, in the boat, who was shot through the shoulder, but by management and care of some squaws, he recovered and got perfectly well.

“A copy of the speech brought in by *Isaac Freeman*, from the Chiefs and Warriors of the *Mawme* towns, to Judge Symmes.

“ ‘*MAWME*, July 7, 1789.

“ ‘*Brothers! Americans!* at the Miami.—*Warriors!* listen to us warriors what we have to say.

“ ‘Now, *Americans! Brothers!*—We have heard from you, and are glad to hear the good speech you sent us. You have got our flesh and blood among you, and we have got yours among us, and we are glad to hear that you wish to exchange; we really think you want to exchange, and that is the reason we listen to you.

“ ‘As the Great Spirit has put your flesh and blood into our hands, we now deliver them up.

“ ‘We *Warriors*, if we can, wish to make peace, and our chiefs and yours will then listen to one another. As we warriors speak from our hearts, we hope you do so too, and wish you may be of one mind, as we are.

“ ‘*Brothers, Warriors,*—When we heard from you that you wished to exchange prisoners, we listened attentively, and now we send some, as all are not here, nor can be procured at present, and, therefore, we hope you will send all ours home, and when we see them, it will make us strong to send all yours, which cannot now all be got together.

“ ‘*Brothers, Warriors,*—When we say this, it is from our hearts, and we hope you do the same; but if our young men should do anything wrong before we all meet together, we beg you to overlook it. This is the mind of us warriors, and our chiefs are glad there is hopes of peace. We hope, therefore, that you are of the same mind.

“ ‘*Brothers, Warriors,*—It is the warriors who have shut the path which your chiefs and ours formerly laid open, but there is hopes that the path will soon be cleared, that our women and children may go where they wish in peace, and that yours may do the same.

“ ‘Now, *Brothers, Warriors,*—You have heard from us; we hope you will be strong like us, and we hope there will be nothing but peace and friendship between you and us.’

“The following prisoners came in with *Isaac Freeman*, viz:

“*John White*, taken from Nelson county, Ky.; *Elizabeth Bryant* and her child, and a child named *Ashby*, who were taken from a

boat at the mouth of the Kentucky river—all its friends said to have been killed at the time. Two others, who were intended to be sent in, ran off the night before Freeman left their towns, to avoid returning to the whites.

“Of those who would be sent in hereafter, was a *Mrs. Bildersback*, whose husband was killed at Mingo Bottom, at the time she was made prisoner; also, a soldier in Captain McCurdy’s company, named *Brady*. He was with a party guarding a surveyor, when made captive. Seven soldiers and several of the inhabitants were killed in the attack.”

I find, in reference to my notes on Symmes’ settlement at North Bend, that he had ten Indian women and children, who, having been made prisoners in an expedition from Kentucky to the Indian towns, had been placed in his hands by Colonel Robert Patterson, for the purpose of exchanging them for white prisoners among the savages, as soon as an opportunity would admit. Symmes, who had always maintained toward the Indians a pacific policy, sent Freeman with a friendly Indian, then on business to North Bend, and one of the prisoners, a boy of fifteen, who, speaking English, could enable Freeman and the Indian to communicate with each other, and Freeman with the Shawanese to whom he was sent.

Freeman lost his life on a later mission to the Indians, being fired on while bearing a flag of truce.

“September 20th.—The Indians visiting Columbia, at the confluence of the Little Miami, they tomahawked one boy and took another prisoner. They were sons of a *Mr. Seward*, lately from New Jersey. On the 30th of the same month, they took another prisoner from the same place.

“On the 12th of December following, a young man, son of *John Hilliers*, of North Bend, going out in the morning to bring home the cows, about half a mile from the garrison, the Indians came upon him. They tomahawked and scalped him in a most surprising manner, took away his gun and hat, and left him lying on his back.

“On the 17th inst. following, two young men, one named *Andrew Vaneman*, the other, *James Lafferty*, went on a hunting excursion across the river. When they encamped at night, and had made a fire, they were surprised by Indians, and fell a sacrifice into the hands of the savages, being killed by their first fire. They were both shot through the back, between their shoulders,

the bullets coming out under their right arms. The Indians tomahawked and scalped them in a most barbarous manner, stripped them of their clothes, and left them lying on their backs quite naked, without as much as one thread on them. Next day, myself and six others went over and buried them together in one grave.

“December 29th.—General Harmar arrived at Cincinnati, and was received with joy. They fired fourteen cannon at the garrison on his landing.

“January 1, 1790.—Governor St. Clair arrived. On his arrival, they fired fourteen guns; and while he was marching to the garrison, they fired fourteen guns more. As soon as he landed, they sent an express for Judge Symmes, who went the next day to see him, and appoint civil and military officers for the service and protection of the settlement.

“April 25, 1792.—As Martin Burkhardt, Michael Hahn, and Michael Lutz, were viewing some lots at the Blue Bank, they were fired on by Indians. Lutz was killed and scalped on the spot, besides being afterward stabbed in different parts of the body. They shot Hahn through the body, and followed him in sight of the garrison, but, finding they could not get his scalp, they fired at him a second time and killed him. Burkhardt was shot through the shoulder, and, in an effort to clear himself, took to the river to swim, but drowned, and was found at North Bend six weeks afterward.

“August 14, 1792.—John Macnamara, Isaac Gibson, jr., Samuel Carswell, and James Barrett, were bringing up a hand millstone, in a canoe, and at the *rifle*, below the station, they were fired at by the Indians. Macnamara was killed, Gibson wounded in the knee, and Carswell in the shoulder; Barrett being the only one escaping without injury.”

I have been furnished the following narrative by the late Judge Matson, of North Bend. In the month of January, 1792, General Wilkinson being about to set out to St. Clair's battle-ground to bury the dead, who had been left there in the disastrous action of the 4th of November preceding, and bring off valuable public property reported to be still on the spot, made a call for volunteers to strengthen his force, which amounted to merely two hundred regulars. Some one hundred and fifty men, or more, from various parts of the county, rendezvoused in Cincinnati. The volunteers

from North Bend, of which I was one, were under the command of Captain Brice Virgin; and we left that place, some mounted, but principally on foot, being promised horses from among those belonging to the United States, which were kept across the river, in Kentucky, where Newport now is. There was the heaviest snow on the ground ever known within the memory of the whites, which, on the day before we started, was increased to two feet in depth. The Ohio had been frozen, and so thick was the ice at Cincinnati, that all our efforts to open a channel for the flats to bring over the horses proved abortive, and they had to be taken up and crossed above the mouth of the Little Miami, where the ice was found strong enough to bear their weight. As soon as we could be made ready, which was on the 25th, the regulars and volunteers set out, the late General Harrison, then an Ensign, and lately arrived, being one of the officers. We took the old trace, opened by General St. Clair. The first night we encamped on the hill, near what is now Cary's Academy, this side of Mount Pleasant, and the next arrived at Fort Hamilton. Left Hamilton pretty late in the day, and encamped that night at Seven Mile creek, and next day reached Ft. Jefferson, then the outside post. Captain Shaylor was in command there.

Here General Wilkinson issued a general order to the effect that the severity of the season had compelled him to abandon one object of the expedition, the destruction of an Indian town fifteen miles below, on a branch of the Wabash, that he would send back the regulars to Fort Washington, and that the mounted men would proceed to the battle-ground, with the public sled, to bring off such of the artillery and other property as might be recovered. We encamped next night eight miles this side of the field of battle, which last spot we reached the succeeding morning at 11 o'clock.

On this day's march, and when we were about half way to the battle-field, we arrived where the pursuit had ceased, and on counting the number of dead bodies which appeared to have been dragged and mutilated by wild beasts, I made it seventy-eight, between that spot and the battle-ground. No doubt there were many more who, finding themselves disabled, crawled into the woods and perished there.

We were ordered to encamp directly where the artillery, etc., had been left, I suppose with the view of beating down the snow to facilitate finding what we were in search of. Here we found

the artillery dismounted, except one piece, a six pounder. Some of the carriages had been destroyed, as far as they could be, with fire. We brought off that piece and two carriages, with the irons of the rest, together with several muskets. We previously buried the dead by the fatigue parties digging a large pit, into which as many of the dead were thrown as it would contain. We had not a sufficiency of spades, etc., to do justice to the undertaking, and left great numbers unburied, as we worked little more than the residue of that day. The men had been all scalped, and so far as their clothing was of much value, all stripped. Hardly one could be identified, the bodies being blackened by frost and exposure, although there did not appear any signs of decay, the winter having set in early, and proving very severe. One corpse was judged, by Gen. Gano and others, to have been that of Gen. Richard Butler. They had noticed the spot where he fell during the action, and entertained little doubt as to his identity. He lay in the thickest of the carnage, the bodies on one side actually lying across each other in some instances. The pile in the pit was so numerous that it raised quite a mound of earth above the surface of the ground when we covered it up. The main body had been encamped on a large open flat, and the advanced corps of Kentuckians occupied timbered ground in front, from which they were driven in by a general assault of the savages, who then occupied sheltered ground, to pour in a destructive fire on the Americans. Two ravines, one on each side of the main encampment, put down to the creek, which were also occupied by the Indians, who were thus enabled to creep under shelter of the edges to attack their enemies.

We then traveled to Cincinnati, where the public horses were given up, and the troops dispersed home, many of the volunteers being frost bitten on the route.

Most of the pieces of artillery had been carried off, and of course escaped our search at the time. Several were afterward found in the bed of the creek. One piece, a six pounder, was plowed up a number of years after, on the battle-ground, by some person who occupied the field, and taken down to Cincinnati and sold for sixty dollars to a Captain Joseph Jenkinson, who commanded a volunteer artillery corps in the place.

Most of my readers are familiar with the narrative of the late Oliver M. Spencer, and have read, in various shapes, the account of his capture by the Indians, between Cincinnati and Columbia,

while on his way home to the latter settlement, in July, 1792. There is a legend connected with that event very current among early settlers, which refers to an incident connected with that narrative, to wit: the escape from those Indians of Mrs. Coleman, by her floating down to Cincinnati, supported by her clothes, which are stated to have buoyed her up all the way from the scene of those events, a distance of four miles.

A visit to Montgomery, in this county, has given me an opportunity to inquire of *Mr. Jesse Coleman*, son of the lady named, and who, at the period referred to, was a boy old enough to know something of the circumstances. He is now considerably over seventy, and his intellect is clear and strong. He gave me the following statement, which he has repeatedly heard made by his mother, by which it appears that the distance she thus floated was not more than a mile, and affords some interesting particulars I had never known.

The scenery of the Ohio, between Columbia and Cincinnati, was, in those days, truly romantic; scarcely a tree had been cut on either side, between the mouth of Crawfish and that of Deer creek, a distance of more than four miles. The sand-bar, now extending from its left bank, opposite to Sportsman's Hall, was then a small island, between which and the Kentucky shore was a narrow channel, with sufficient depth of water for the passage of boats. The upper and lower points of this island were bare, but its centre, embracing about four acres, was covered with small cotton-wood, and surrounded by willows extending along its sides almost down to the water's edge. The right bank of the river, crowned with its lofty hills, now gradually ascending, and now rising abruptly to their summits, and forming a vast amphitheatre, was from Columbia, extending down about two miles, very steep, and covered with trees quite down to the beach. From thence, nearly opposite the foot of the island, its ascent became more gradual, and for two miles farther down, bordering the tall trees with which it was covered, was a thick growth of willows, through which, in many places, it was difficult to penetrate. Below this, the beach was wide and stony, with only here and there a small tuft of willows, while the wood on the side and top of the bank was more open. Not far from this bank and near the line of the present turnpike, was a narrow road leading from Columbia to Cincinnati, just wide enough for the passage of a wagon, which, winding round the point of the

hill above Deer creek, descended northwardly about four hundred feet, and crossing that creek, and in a southerly direction ascending gradually its western bank, led along the ground, now Symmes street, directly toward Fort Washington, and diverging at the intersection of Lawrence street to the right and left of the fort, entered the town.

The river between Columbia and Cincinnati is thus minutely described, not only to give an idea of its former appearance to those who have become residents here since, but also to explain the statement which Mr. C. gave me.

Spencer, as he tells us in his own narrative, had got on board a canoe at the bank in front of Fort Washington, which was just ready to put off from the shore on the afternoon of the 7th of July. It was a small craft, and hardly fit to accommodate the party, which thus consisted of a Mr. Jacob Light, a Mr. Clayton, Mrs. Coleman, young Spencer, a boy of thirteen, and one of the garrison soldiers, which last individual, being much intoxicated, lurched from one side of the canoe to the other, and finally by the time they had got up a short distance above Deer creek, tumbled out, nearly upsetting the whole party. He then reached the shore, the water not being very deep at the spot. Spencer did not know how to swim, and had become afraid to continue in the canoe, and was therefore at his own request put on shore, where they left the soldier, and the party in the boat and Spencer on shore proceeded side by side. Light propelled the boat forward with a pole, while Clayton sat at the stern with a paddle, which he sometimes used as an oar, and sometimes as a rudder, and Mrs. Coleman, a woman of fifty years, sat in the middle of the boat. One mile above Deer creek, a party of market people, with a woman and child, on board a canoe, passed them on their way to Cincinnati. Light and the others had rounded the point of a small cove, less than a mile below the foot of the island, and proceeded a few hundred yards along the close willows here bordering the beach, at about two rods distance from the water, when Clayton, looking back, discovered the drunken man staggering along the shore, and remarked that he would be "*bait for Indians.*" Hardly had he passed the remark, when two rifle shots from the rear of the willows struck Light and his comrade, causing the latter to fall toward the shore, and wounding the other by the ball glancing from the oar. The two Indians who had fired, instantly rushed from their concealment to scalp the dead

and impede the escape of the living. Clayton was scalped, and Spencer, in spite of all his efforts to get off, was made prisoner, but Light soon swam out of reach of his pursuers, and Mrs. Coleman, who had also jumped out, preferring to be drowned to falling into the hands of Indians, had floated some distance off. The Indians would probably have re-loaded and fired, but the report of their rifles brought persons to the opposite shore, and, fearing to create further alarm, they decamped with their young prisoner in haste, saying, "squaw must drown." Light had first made for the Kentucky shore, but, finding himself drifting under all the exertions he could make in his crippled state, directed his way out on the Ohio side. Mrs. Coleman followed as well as she could, by the use of her hands as paddles, and they both got to shore some distance below the scene of these events. Light had barely got out when he fell, so much exhausted that he could not speak, but after vomiting blood at length came to. Mrs. Coleman floated nearly a mile, and when she reached the shore, walked down the path to Cincinnati, crossed Deer creek at its mouth, holding on to the willows which overhung its banks; the water there in those days flowing in a narrow current that might almost be cleared by a spring from one bank to the other. She went direct to Captain Thorp, at the artificer's yard, with whose lady she was acquainted, and from whom she obtained a change of clothes, and rested a day or two there to overcome her fatigue.

The following narrative I obtained from the lips of Major Jacob Fowler, the finest specimen of a western pioneer I ever saw, and who died but a short time since at the age of eighty-eight years. When I saw him last, at the age of eighty-four, he could see to read without spectacles, all his teeth were perfect, and not a gray hair in his head; his step was still firm, and his form erect:

In 1789, I engaged in a trading expedition to Marietta and Kanawha, with one Benjamin Hulin. We loaded a flatboat with whisky, cider, and store goods. These we sold out at Kanawha and on Elk river, one of its branches, and leaving Hulin at Point Pleasant, I set out for Cincinnati, which had been laid out a few months before. Here I found Major Doughty engaged in building Fort Washington, after having put up four block houses opposite the mouth of Licking river. My motive for stopping there, was to see Matthew, a young brother, who had become one of the settlers under Ludlow, Patterson, and Denman. I found my brother

there, owning an in and out-lot, and entered with him into a contract to supply the town and garrison with meat. This continued for some time, until the contractor fell behind in his payments, and the town increasing in population, we found sufficient market there, together with what was bought by General Harmar, and a few of the officers who knew what good living was, and were fond of it. We were paid 2*d* per pound for buffalo and bear meat, and 2½*d* for venison. This was Pennsylvania currency, seven shillings and sixpence to the dollar. The skins and hides we sold to a tanner, Archer, I think, by name. His tan-yard was where Jesse Hunt afterward followed the business. We got our pay from the contractor finally, in goods, at a high price; and Captain Pratt, who bought on the officers' account, paid us in gold.

The place was called Cincinnati when I first saw it, although the giving of that name is said to have been done by St. Clair afterward. I am positive of the fact. At that time, there appeared forty or fifty cabins in the town, and but one or two stone chimneys among them all. The timber on the site of the built parts had been a heavy growth of sugartree, beech, and oak, with a few black walnuts, mostly large, and the cabins were surrounded with standing timber, as well as with large butts of logs, considered too difficult and unprofitable to split, and which were therefore left to decay. The corners of the streets, as far as practicable, were blazed on the trees.

Our hunting-ground was usually some ten or fifteen miles in the interior of Kentucky. Occasionally we hunted on Mill creek, four or five miles from the town, where there was a good supply of game. Our usual crossing-places from Kentucky, were at Yeatman or Sycamore street cove, or at the stone landing, a cove higher up, so called because the stone wanted for Fort Washington was landed there.

Next spring I went up the river to collect what money remained due on my trading adventure to Elk creek, which I failed to accomplish that time, and did not get my pay till the succeeding year. On my return to Point Pleasant, I found my old partner, Hulin, who had made his way, on the day before, from the Upper Kanawha, having effected a narrow escape from the savages a few miles outside of Point Pleasant. He was making his way toward town along the hill which skirts the Kanawha, on the opposite side, when he was discovered by a party of five or six Indians. The

path wound down the hill, which is very steep just at that spot, nearly doubling the direct distance to Point Pleasant, but finding no readier way of escape, and the thicket of the woods hindering the view of the whole danger before him, he sprang off a precipice and fell through the top of a large buckeye, which grew on the side of the bank, so high as to reach the level of the hill top, making a plunge of fifty-five feet, four inches, as measured with a tape-line by Colonel Thomas Wilson and myself the next day. He alighted on a slope of damp ground, which broke his fall, but the impulse sent him forward two additional descents, one of seventeen feet, and the other of ten feet more. By the time he had finished his last jump, he was up to his knees in the soft mud of the river bottom, but he contrived to extricate himself, and to push on to the crossings, limping very badly for the first quarter of a mile. His calls then brought out some of the town's people to his assistance. His clothes were torn, and his limbs were scratched by the fall, and it was more than a month before he got over its effects. The Indians, warned by his disappearance, crept cautiously to the edge, and declined following him further. One of them had pushed on lower down the hill, and there found a hollow taking down in the proper direction for pursuit; but seeing Hulin keeping on apparently unhurt, he gave up the chase and returned to his companions. Had the others then followed that route, there can be no doubt they would have overtaken him before he could have reached the river in the crippled state in which he then was.

When I reached Point Pleasant, I saw Lewis Whetzel ranging the town as freely and unconcerned as though he had been on his own farm; while at the same time there was a large reward offered for his apprehension by General Harmar. While I remained there, Lieutenant Kingsbury, in scouting about town, met Whetzel unexpectedly. Lewis halted with great firmness in the path, leaving the Lieutenant to choose what course he pleased, feeling himself ready and prepared for whatever might be. Kingsbury, a brave man himself, had too much good will to such a gallant spirit as Whetzel to attempt his injury, if it were safe to do so. He contented himself with shouting to him, "*Get out of my sight, you Indian killer!*" and Lewis, who was implacable only to the savages, retired slowly and watchfully, as a lion draws off, measuring his steps in the presence of the hunters, and as ready to avoid

danger unnecessarily as to seek it when duty called him to act. Lewis had made his escape but a short time before from Marietta, with handcuffs on, and when he saw an acquaintance of his, Isaac Wiseman by name, fishing in a canoe, not daring to swim the river in that condition, nor to call to the opposite shore, for fear of being within hearing of some of the party in pursuit, waved his hat with his hands, until he succeeded in attracting his attention and assistance to escape.

Once on the Virginia side, he feared nothing, as he indeed had none but well-wishers there, who would have shed their blood, if necessary, in his defence. Years, however, had to elapse, and Harmar to return to Philadelphia, before Wiseman dared acknowledge the service, the whole country being under military rule, and no civil authority at that time to interfere.

I returned to Cincinnati in the summer of 1791. Harmar's expedition had occurred during my absence up the river, but I found General St. Clair just starting off to give the Indians battle, and break up their stations. St. Clair was a good tactician of the old school, but unfitted for Indian fighting; knowing, indeed, nothing of the savages, their character, nor mode of warfare.

In the summer of 1791, General St. Clair set out on his unfortunate enterprise. I had accompanied the army with a view of supplying game to help out with what I knew would be an inadequate supply,—the public rations; and was engaged in dressing deer skins, at Fort Hamilton, for moccasins, which were in request for the troops, when I received the unsolicited appointment from the General of Assistant Surveyor to John S. Gano, then commanding the surveys. St. Clair had about twenty-four hundred men in force, the United States regulars being commanded by Major Hamtramck, and the residue, who were enlisted for six months in this service, were placed under the command of General Richard Butler, of Pittsburg. We marched as far as the site of Fort Jefferson, and built the fort. Leaving Major Shaylor in command, we marched thence to Greenville, six miles, and encamped at the bank of the creek there, and halted three or four days to build a bridge over it. On the evening after the bridge was built, General St. Clair directed me to meet Captain Lemmon and his company, of Kentucky, at the end of the bridge, at daybreak next morning, and accompany him on an exploration after the Indians, of some twenty miles on a northwest course. It was in my post of surveyor

that I was attached to this corps to direct its route. Accompanied by two trusty scouts, I preceded the party.

After accomplishing nearly the allotted distance, we spied a smoke before us, and came, before we were aware, on a party of savages. Our route lay through a rich wet land, and the weeds, which were breast high, had hid the party from our eyes, and served also to conceal our approach as we crept up cautiously to reconnoitre. Having previously arranged our mode of proceeding, one of the scouts was dispatched back to the Captain, with the understanding that as soon as his party heard us fire, they were to rush up to our support. The other scout and myself then took a tree not forty yards from the Indians. It was a large white-oak, five or six feet across, affording us ample room and protection, one on each side of it. I had never fired at a man before, and while I was steadying my rifle, which shook in my hands from the momentary excitement of the scene, one of the Kentuckians, in the rear, fired into where he must have judged, by the smoke, that they lay, but from such a distance as to make it a perfect random shot. The Indians sprang to their feet, and disappeared in an instant. We followed as far as we could, but as they ran for their lives, unincumbered by anything, they escaped.

Returning from the pursuit, we found venison stuck up all around the fire, and moccasins, leggings, blankets, and even some of their shot pouches, which they had left upon their springing up, so effectual had been the surprise. We now heard guns fired in front, probably as signals, for they were directly answered in greater numbers; and, addressing the Captain, I observed that if we meant to find Indians, we need not go a step further, and if we valued our lives, we had not a minute to lose in making our escape, for I was convinced that the main body of them, several hundreds, as I judged by the sound and direction of the firing, were just at our elbows. We struck a course due west, so as not to return by the track we had made on our way out, which would have beaten such a trace as would have enabled them to follow us, even after dark. We pursued this course till about 10 o'clock, at which time we left six of our party concealed behind a large log to ascertain if we were pursued, while we were to move a short distance further on, and encamp for the night. We told them we would finish the cooking of the venison, and save their share till they got up, which they were instructed to do by midnight, if they saw or heard

nothing to alarm them before. We encamped accordingly, and as the Indians had not made their appearance, we were confident they were waiting for daylight to find our trail.

I was so exasperated with the militiaman for his exposing us to all this danger and fatigue, that I was for having him punished on the spot; but the Captain, whose authority was only nominal, told me privately that I might complain of him to the General, but that we could do nothing with him there.

As we approached the encampment of the army, we met a party of five Kentuckians, who were on a hunt. We advised them to return, alleging that the Indians were in force, and we did not know how near us. They paid no attention to the advice, and had not gone far before they were fired on, and four out of the five were killed by the savages.

The army marched next day on an Indian trail, which we followed until it bore too far north, when we left it, bearing farther west. At the next encampment we made, there were new arrivals from Cincinnati, and word was brought us that my brothers, Edward and Matthew, had been attacked near Fort Hamilton, by Indians, and Matthew killed. They had two horses with them, loaded with venison and deer skins. Edward made his escape on foot, unwounded, but the horses, with the skins and meat, fell into the hands of the Indians. We next encamped at Stillwater creek, and thence eight miles further to where the battle was fought.

It will hardly be believed, although an absolute fact, that St. Clair kept out no scouting parties during his march, with the single exception of the one on which I was detached, and this, too, for the last three days, when he knew we were in the Indian country, and ought to have been aware, as well as I was, that they were on our skirts all the time, and we should have been completely surprised by the attack, when it was made, if it had not been that volunteer scouting parties from the militia were out the evening before, and the constant discharge of rifles through the night, warned us to prepare for the event. The militia were encamped about a quarter of a mile in front of the residue of the army, so as to receive, as they did, the first shock of the attack, which was made a little after daybreak.

The camp was on the bank of a small creek, one of the heads of the Wabash river; the ground was nearly level, and covered with a heavy growth of timber. As surveyor, I drew the rations

and pay of a subaltern, but as an old hunter, was not disposed to trust myself among the Indians without my rifle; indeed I found it very serviceable on the march in procuring game, the army being upon not more than half rations the whole campaign.

My stock of bullets becoming pretty low from hunting, as soon as it was daylight that morning, I had started for the militia-camp to get a ladle for running some more, when I found that the battle had begun, and met the militia running in to the main body of the troops. I hailed one of the Kentuckians, who I found had been disabled in the right wrist by a bullet, asking him if he had balls to spare. He told me to take out his pouch and divide with him. I poured out a double handful, and put back what I supposed to be half, and was about to leave him, when he said: "Stop; you had better count them." It was no time for laughing, but I could hardly resist the impulse to laugh; the idea was so ludicrous, of counting a handful of bullets, when they were about to be so plenty as to be had for the picking up, by those who should be lucky enough to escape with their lives. "If we get through this day's scrape, my dear fellow," said I, "I will return you twice as many." But I never saw him again, and supposed he shared the fate which befel many a gallant spirit on that day. I owe the bullets, at any rate, at this moment.

On returning to the lines, I found the engagement begun. One of Captain Piatt's men lay near the spot I had left, shot through the belly. I saw an Indian behind a small tree, not twenty steps off, just outside the regular lines. He was loading his piece, squatting down as much as possible to screen himself. I drew sight at his butt, and shot him through. He dropped, and as soon as I had fired, I retreated into our lines to re-load my rifle. Finding the fire had nearly ceased, at this point, I ran to the rear line, where I met Colonel Darke, leading his men to a charge. These were of the six months' levies. I followed with my rifle. The Indians were driven by this movement clear out of sight, and the Colonel called a halt, and rallied his men, who were about three hundred in number. As an experienced woodsman and hunter, I claimed the privilege of suggesting to the Colonel, that where we then stood, there being a pile of trees blown out of root, would form an excellent breastwork, being of sufficient length to protect the whole force, and that we might need it. I judged by the shouting and firing, that the Indians behind us had closed up the

gap we had made in charging, and told the Colonel so. "Now, if we return and charge on the Indians on our rear, we shall have them with their backs on us, and will no doubt be able to give a good account of them." "Lead the way, then," said he, and rode to the rear to march the whole body forward. We then charged on the Indians, but they were so thick we could do nothing with them. In a few minutes they were around us, and we found ourselves alongside of the army baggage and the artillery, which they had taken possession of. I then took a tree, and after firing twelve or fourteen times, two or three rods being my furthest shot, I discovered that many of those I had struck were not brought down, as I had not sufficient experience to know that I must shoot them in the hip to bring them down. As to the regulars with their muskets, and in their unprotected state, it was little better than firing at random.

By this time there were but about thirty men of Colonel Darke's command left standing, the rest being all shot down and lying around us, either killed or wounded. I ran to the Colonel, who was in the thickest of it, waving his sword to encourage his men, and told him we should all be cut down in five minutes more, if we did not charge on them. "Charge, then!" said he to the little line that remained, and they did so. Fortunately the army had charged on the other side at the same time, which put the Indians, for the moment, to flight. I had been partially sheltered by a small tree, but a couple of Indians, who had taken a larger one, both fired at me at once, and feeling the steam of their guns at the belly, I supposed myself cut to pieces. But no harm had been done, and I brought my piece to my side, and fired, without aiming, at the one that stood his ground, the fellow being so close to me that I could hardly miss him. I shot him through the hips, and while he was crawling away on all fours, Col. Darke, who had been dismounted, and stood close by me, made at him with his sword, and struck his head off. By this time the cock of my rifle's lock had worn loose, and gave me much trouble, and meeting with an acquaintance from Cincinnati, named McClure, who had no gun of his own, but picked up one from a militiaman, I told him my difficulty. "There is a first-rate rifle," said he, pointing to one at a distance. I ran and got it, having ascertained that my bullets would fit it.

Here I met Captain J. S. Gano, who was unarmed, and handing him the rifle I had gone into battle with, observed to him that we

were defeated, and would have to make our own escape as speedily as possible; that if we got off we should need the rifles for subsistence in the woods. The battle still raged, and at one spot might be seen a party of the soldiers gathered together, doing nothing, and having nothing to do but present mere marks for the enemy; they appeared stupified and bewildered with the danger. At another spot the soldiers had broken into the marquees of the officers, eating the breakfast from which these had been called into battle. It must be recollected that neither officers nor men had eaten anything the whole morning. Some of the men were shot down in the very act of eating. Just where I stood, there were no Indians visible, although their rifle balls were striking all around. At last I saw an Indian break for a tree, about forty yards off, behind which he loaded and fired four times, managing to bring down his man every fire, and with such quickness as to give me no chance to take sight in the intervals of his firing. At length I got a range of two inches inside his backbone, and blazed away—down he fell, and I saw no more of him.

A short time after, I heard the cry given by St. Clair and his Adjutant, Sargent, to charge to the road, which was accordingly done. I ran across the army to where I had left my relative, Capt. Piatt, and told him that the army was broken up, and in full retreat. "Don't say so," he replied, "you will discourage my men, and I can't believe it." I persisted a short time, when, finding him obstinate, I said, "If you will rush on your fate, in God's name do it." I then ran off toward the rear of the army, which was making off rapidly. Piatt called to me, saying, "Wait for me." It was no use to stop, for by this time the savages were in full chase, and hardly twenty yards behind me. Being uncommonly active in those days, I soon got from the rear to the front of the troops, although I had great trouble to avoid the bayonets of the guns which the men had thrown off in their retreat, with the sharp points toward the pursuers.

The retreat began about 1 o'clock, the battle having lasted about three hours and ten minutes. It has been stated that the Indians followed us thirty miles, but this is not true. The distance was not more than six, and my duty as surveyor having led me to mark the miles, every day, as we proceeded on our march out, it was easy to ascertain how far we were pursued. The Indians, after every other fire, fell back to load their rifles, and regained lost

time by running on afresh. Wearied out at length, and anxious for plundering, they returned to the baggage, artillery, camp-stores, etc., which had been abandoned on the battle-ground to their fate. Here they finished their work by scalping the dead, and those of the wounded who had been too much disabled to escape. Even during the last charge of Colonel Darke, the bodies of the dead and the dying were around us, and the freshly-scalped heads were reeking with smoke, and in the heavy morning frost looked like so many pumpkins in a cornfield in December. It was on the 4th of November, and the day severely cold for the season; my fingers became so benumbed, at times, that I had to take the bullets into my mouth and load from it, while I had to take the wiping-stick in my hand to force them down.

We came on to Fort Jefferson, and six miles beyond it we met Colonel Hamtramck, who had been detached to hurry on the provisions, as well as to escort them in safety, to the camp. He had five or six hundred men under his command. Hearing the firing, he had abandoned the business he was sent on, and was making a forced march to the field of battle, when he was met by the whole body in retreat.

The following narrative was gathered from the lips of several individuals concerned in the pioneer struggle to which it relates.

In the early settlement of *Hamilton co.*, as the settlers advanced into the interior, leaving that protection which the garrison of *Fort Washington* afforded the infant town of *Cincinnati*, they were compelled, as a means of safety, to form stations of a few cabins contiguous to each other, and connected with palisade stakes around the inclosed ground, usually a very limited space. One of these defences, perhaps the feeblest of all, was *White's Station*, so named after *Captain Jacob White*, the most active member of the little settlement. It was located about half a mile southeast of the present village of *Carthage*, and may be described as follows:

It embraced some half dozen cabins, three of which were on each side of Mill creek, and close to the creek banks. One of the cabins on the southeast side of the creek was built block-house fashion, and was surrounded by a log fence, made rather for the purpose of shutting out hogs and cattle, than for defence. This was occupied by Captain White himself. The other two on the same side of the creek, belonged, one to *Andrew Goble*, the other to old *Mr. Flinn* and family, two of his sons—stout young men—

Stephen and *Benjamin Flinn*, forming a part of it. On the opposite side of the creek, resided *Andrew Pryor*, *John S. Wallace*, and a man named *Winans*. Wallace, with his family, was absent at Cincinnati on the day the attack was made. *Mrs. Moses Pryor*, a widow, whose husband had been killed by the Indians, in 1792, resided, with her three children, in the family of her brother-in-law. Andrew Pryor, already alluded to—the whole male force of the station consisting of six men and one boy of twelve years, *Providence White*, the last son of Captain White, yet living and resident now in Missouri.

On the morning of the 19th of October, 1793, an express, dispatched by *General Wayne*, passed the station on its way to Cincinnati, with the intelligence of the defeat of *Lieutenant Lowry*, with his command, about thirty miles north of *Fort Hamilton*.

This of course greatly alarmed the inhabitants of the station, and put them on their guard. Nothing, however, had any tendency to increase that feeling until that night. The dogs belonging to the station had been observed barking incessantly for some time before night, on a hill about three or four hundred yards out in the woods. Half an hour before sundown, probably, Andrew Goble proposed to some of the men to go out and see whether the dogs had not treed a raccoon. White objected to any persons leaving the station, as he thought it might be Indians at which the dogs were barking, and issued his orders accordingly, that no man should leave his premises. Goble, however, being rather fool-hardy than prudent, put out about sundown, saying that he would have the coon, Indians or no Indians. He had hardly left the station more than half the distance to the dogs, when he received a volley from the rifles of the savages, and fell pierced, as it was afterward discovered, by a dozen balls.

The *Indians*, who, if they had not been disturbed, would doubtless have concealed themselves, according to their usual habit, until daybreak, now burst forth from their covert, under cover of the banks of the creek, and fired at two little children which belonged to the widow Pryor, and had been playing on the north side of the creek. One was shot dead on the spot, and the other ran as fast as possible to its parent's dwelling. The mother, who had seen what was passing, rushed out on the first alarm, seized the dead body and returned instantly to aid the other in its flight. Just as she overtook and was about to seize it, a rifle ball struck the child,

and it fell mortally wounded. She succeeded, however, in reaching her cabin with the children, which, by this time, were both lifeless. The Indians were obliged to retreat from the creek bank, as they were exposed to the fire of both Winans' and Pryor's cabins, and if they had crossed the creek to take shelter under the other bank, they would have been exposed to the fire of the block-house: they accordingly withdrew for a few minutes to the high ground, and then, returning, made an assault on the block-house.

The savages were led by a very large Indian, who came on in advance of his comrades, springing forward and yelling at every jump he made. He succeeded in getting inside the log fence, when he was shot dead by Captain White. His followers, seeing their leader fall, retreated immediately, and kept at a more respectful distance. This was the only attack on the station itself, although a fire was kept up by the Indians for two hours or more. Of course, even if they had been within striking distance, none of the bullets from the settlers could reach them in the dark. While on their retreat from the station, several of the savages had been seen to fall victims to the rifles of the whites in making the first onset, but no dead bodies were found afterward by the whites, except that of the leader, who fell within the inclosure, and whose body was too heavy to lift over the substantial fence around the block-house. The bodies of whoever else might have been killed, were carried off and concealed by burial at the first leisure of the Indians.

As soon as it was dark, *Andrew Pryor* and *Winans* brought their families over the creek to the block-house, and Pryor, mounting a horse, started off to Fort Washington for assistance. Ten dragoons, each of whom had an infantryman mounted behind him, were dispatched and returned as fast as possible to the station. They were accompanied by *John S. Wallace*, who reproached himself for being absent at the attack, although without cause, as the assault was entirely unexpected when he left for Cincinnati.

The party reached the station unmolested; but the Indians, it appeared, had finally withdrawn. They were judged by the tracks to be forty in number; and had they not been ignorant of the weakness of the party defending the station, might have easily carried their point.

Capt. White survived to the advanced age of ninety, in comparative vigor of mind and body—a fine specimen of the early pioneers.

In the spring of 1794, *John Ludlow*, who, with his brother *Israel*, had been residing in Cincinnati, left that place to take possession of his farm, near the junction of the old *Hamilton* road, and the *Hill* road to *Carthage*. The inhabitants of Cincinnati were still under the apprehension of Indian hostilities, inspired by *Lowry's* defeat, near *Eaton, Preble county*, on the 17th of October, 1793, and the attack on *White's Station*, just narrated. As a measure of prudence and precaution, *Israel Ludlow*, with the company of militia under his command, accompanied his brother. *Jacob White*, of the station which bore his name, was of the party; the *Ludlow* farm being on the direct route to *White's Station*, which was half a mile from *Carthage*. The party reached the farm in safety, and commenced unloading the wagon; *White*, with a sick horse in charge, proceeded on alone. When he was within two hundred yards of what has since been called *Bloody run*, he heard the firing of rifles, and discovered in a few minutes a party of pack horsemen, four in number, who had been waylaid and fired on by the savages. One was killed on the spot, being found lying in the run, which received its name from this circumstance. He had been tomahawked and scalped. Another had been mortally wounded, who made out to reach *Abner Boston's*, at *Ludlow's ford*, on *Mill creek*; where he died. A third was slightly wounded, and the fourth escaped unhurt. *White* left the horse, and returned to *Ludlow* and his party. Pursuit by the whole company was immediately made, and the Indians, supposed by their trail to be five or six individuals, were followed two or three miles, when the chase was given up, and the party returned and buried the dead man on the road side.

The remains of this poor fellow were plowed up three or four years since by *Solomon Burkhalter*, while employed in widening and improving the public road. The bones were carefully gathered and laid aside, and a hole being dug for the purpose, beneath the ditch of the road, they were deposited immediately under the spot where they originally lay.

One of the few marble monuments in the Presbyterian burying-ground, on Twelfth street, has been erected to the memory of one of the early business men of this region, and, in some sense, one of the pioneers of the west. I refer to Colonel Robert Elliott, who, in connection with Colonel Eli Williams, of Hagerstown, Md., was one of the several contractors of supplies for *Wayne's* army, on his

march to the Indian country. Various incorrect accounts having been published of the circumstances attending his death, I put upon record the following from an authentic source, and which I believe is the truth in the premises.

Colonel Elliott was a native of Pennsylvania; had settled in Hagerstown, and at the period to which I am about to refer, 1794, was out west superintending the deliveries of his contracts. He left Fort Hamilton, accompanied by a waiter, taking what is now called the Winton road, to Cincinnati. On reaching about four miles of his journey, he was fired on by savages, in ambush, and killed. He fell from his horse, which made his way back to Hamilton, followed by the servant upon the other horse.

Elliott was an uncommonly large man, being both tall and heavy, and weighed nearly three hundred pounds. He wore a wig, which of course came off, under the application of the scalping-knife, without exhibiting marks of blood, to the great surprise of the Indians, who viewed it as a great imposition, and spoke of it afterward as "a d—d lie."

The horse was a remarkable one, worth one hundred and twenty dollars in those days, when it required a good horse to bring seventy-five dollars. He was a dark brown, but just where a pillion would have been fastened to the saddle, and exactly corresponding with it in size and shape, was a space entirely white.

Elliott's body was boxed up and put into his own wagon, and sent the next day to Cincinnati for burial, the waiter accompanying it, and riding the Colonel's horse. Nearly, if not exactly, where Elliott had been killed the day before, a ball from Indians in ambush killed the servant also, the horse escaping, as before, to Hamilton, and the wagoner flying for his life. The box was broken open by the savages in expectation of it containing something of value. It was left, on discovering the contents, only the wagon-horses being carried off.

A party was then detached from the fort, which delivered the body at Fort Washington, and it was buried in the usual burying-ground, at the corner of Main and Fourth streets.

Many years after, his son, Commodore Jesse D. Elliott, then on a visit to this city, having ascertained the place of his interment, removed the body to the present burial-ground of the First Presbyterian Society, erecting, as the tablet itself states, the monument to the memory of his father, Colonel Elliott.

Ellison E. Williams, who was yet living in Covington, Ky., as late as 1848, gave me his recollections of pioneer events, as follows: In 1795, soon after the defeat of the Indians by General Wayne, I started for Detroit, where my brother William had been working for some time. My main business was to sell a stud horse there. I succeeded in obtaining five hundred dollars in cash and trade for the beast. A part of the trade was a first-rate gelding, the finest brute I ever owned, and for which I got, at Dayton, afterward, one hundred and fifty-five dollars, although half the money would buy a pretty good horse in those days.

My brother accompanied me on my way home to Cincinnati. At Fort Defiance, we fell in with an old man, a cripple, who also kept company with us. When we got within ten or twelve miles of Dayton, which had been just laid out, and a few houses built there, we encamped, turned our horses loose to graze, and prepared to cook a meals-victuals, and rest ourselves. While I was kindling a fire for this purpose, I heard the old man, who had occasion to turn aside into the brush, call out that the Indians were catching our horses. The horses were in the high weeds and brush; the weeds being as high as themselves, we could not see them at a short distance. As I ran up, I saw an Indian who had caught my gelding, trying to mount him, but to no purpose. I stepped forward, laid my hands on the back of his shoulders, and jerked him heels over head. The villain struck me twice with his butcher-knife, and cut me through the arm with great violence. I knocked him down with my fist and stamped on him, and but for the persuasions of my party, would have killed him. My brother was about to interpose in an early period of the scuffle, when the other Indian leveled his rifle at him, exclaiming in very good English, "*Let them fight it out.*" Our whole party were unarmed, not apprehending any trouble; and it was almost a miracle that we all got off alive and safe from the Indians, who both had rifles.

Before this, however, and in the fall of 1790, I had volunteered in Harmar's expedition, and was on my road, when my horse, descending a piece of hill ground, got one foot entangled among the roots of a tree, and in his efforts to extricate himself, fell and broke his leg. In the fall I was so much hurt as to confine me to bed for two weeks, before I could again walk.

Next year my brother James and myself volunteered with St. Clair, among the troops from Kentucky, and continued with him

till the defeat. I assisted in building Forts Hamilton, and Jefferson, and Greenville. I was not in the battle, being detached, with the troops under Maj. Hamtramck, back to Fort Hamilton to escort on the provisions, clothing, etc., of which the army stood in want. When we had nearly reached, on our return, the place where we had left the army, we met the flying stragglers. I then returned to Kentucky.

Wayne sent on troops, in 1792, and came on himself, in 1793, and encamped his entire force at "*Hobson's Choice*," a strip of dry ground above Mill creek, reaching, at its upper range, somewhere about the present gas works, and started thence about the 1st of August. James and I were sent for as old Indian fighters, and a corps of about sixty-five scouts was formed and put under the command of Captain Ephraim Kibby, of Columbia. We moved on the line of forts already constructed, built Fort Recovery—St. Clair's battle-ground—Fort Wayne, in the forks of the Maumee, and Fort Defiance, on the Auglaize. We then went on to the rapids of the Maumee, where Wayne defeated the Indians. Here, again, I escaped the battle, although less danger was incurred in it than usual in Indian fights, the regulars having driven the enemy with such spirit, and at such a rate, that the volunteers, and especially the mounted men, who were compelled to take an extensive circuit to get round the fallen timbers where the charge was made, were not able to overtake either the pursuers or pursued, who were driven two miles on a run at the point of the bayonet. Captain Kibby's company had been detached across the river to scour the woods, and rouse the Indians, who were supposed to be concealed on that side, and likely to endanger the rear of the American troops, as they could easily have crossed by wading the ripple above the rapids. It appeared, however, that there were none at that place.

I returned home, being regularly discharged. There was hardly any money in circulation. A few of the officers drew enough to pay their expenses home, but the private soldiers and volunteers did not get their pay for many months afterward.

In 1850, I had the pleasure of bringing together, after a separation of sixty years, two of the surviving defenders of *Dunlap's Station*, which, it will be remembered, was attacked by the *Girtys*, and a large body of savages, on the 7th *February*, 1791. These were *William Wiseman*, Orderly-sergeant to *Lieutenant Kingsbury*, who commanded on that occasion, and *Samuel Hahn*, who, with

his father, mother, four brothers, and three sisters, formed one of the families which were invested in the fort. Wiseman was nearly twenty-one, and Hahn between thirteen and fourteen years of age at the time—the first being, in 1850, in his eighty-first year, and the other over seventy-three. Both were of uncommon vigor of mind and body, for their respective ages. Wiseman is since dead, but Hahn still survives, residing at Newtown, in this county.

The narrative they gave of that interesting scene, differs in many particulars from the popular version of the event, and as I had an opportunity of conversing with both before they had seen each other, I found that they corresponded to a degree which corroborated both statements. I give the personal narrative of Wiseman as a matter of preference in his own words, proposing to follow it with that of Mr. Hahn.

I was born *February 10, 1770, in St. Mary's county, Md., and on the Chesapeake Bay, where I resided for some years of my minority. In 1786, I left, in company with my elder brother, Robert, to reside in Hagerstown. In the fall of 1790, I enlisted in the United States service, in the company of Capt. Alexander Truman, who afterward lost his life while bearing a flag of truce to the Indians. I had been at the residence of Dr. Jacob Schnebly, and found Captain Truman enlisting soldiers to go to the west. I had long contemplated a visit to that land of promise, and thought I could never see it under more favorable circumstances than presented themselves at this time. I accosted the Captain, therefore, and inquired of him if he did not want another soldier? He replied that it was out of his power to take me, for he had neither arms, ammunition, nor clothing for another recruit. I was about withdrawing, when he called me back, and told me that he had a great mind to take me any how, in my citizens' clothes, and that I should be supplied with rations from his own table. He promised, also, that if I would behave myself as I ought, he would be a father to me. I agreed to this arrangement, and started with the rest, reaching Cincinnati in December, 1790. We reported ourselves at Fort Washington, on our arrival, to General Harmar, who commanded that post. As one of the youngest men in the army, I was soon put on active duty. The settlers at Dunlap's Station, on the Great Miami, had complained to General Harmar of Indian depredations, and even massacre, and asked a detachment for their protection, being in momentary expectation of an attack from the*

savages. *David Gibson*, one of the settlers, had been taken prisoner, and *Thomas Larrison* and *William Crum* chased at the peril of their lives into the fort or station, and the inhabitants hardly dared venture out after their cows, as they strayed off into the woods. Accordingly, General Harmar dispatched Lieut. Kingsbury with a party of thirteen soldiers, of which I was one, acting as Orderly-sergeant. A larger body was detached as an escort, to see us safe to the station. We all marched on foot and reached our post without accident or adventure. Our escort returned, without loss of time, to Fort Washington.

The settlement had been made, originally, by *John Dunlap*, who called it *Colerain*, after the town in *Ireland*, from which he came. He laid it out as a town, into lots, but at the time I refer to, had left the place. It appeared, afterward, that he had no title to the land, and eventually the settlers lost what they had bought. The settlement or station was, however, known by his name, although *Colerain* subsequently became, as it still remains, the name of the township in which the ground lies. The fort, or station, consisted of a few cabins, lying in a square of perhaps an acre or more. These had been built, for convenience sake, facing each other, and with the roofs, of course, sloping outward; the very reverse of what they should have been for efficient defence. The outer edges of these were so low, that it was not uncommon for the dogs, which had been shut out, to spring from adjacent stumps on to the roof, and thence, side-ways, into the inclosure. At the corners of the square, block-houses had been constructed, and pickets, very weak and insufficient for defence against a resolute and active enemy, filled up the intervening spaces inclosing the whole. There were but eight or ten persons, besides the regulars, capable of bearing arms, and the entire number of the fort, exclusive of the soldiers, did not exceed thirty souls.

We reached our destination in the latter part of January, 1791. One of the first services at the station we were called on to perform, was to chop down the trees immediately adjacent, which had been recently girdled, and which Lieut. Kingsbury judged would afford advantage to an enemy in his approaches. The underbrush had been already cleared out and burnt. These trees were cut down, chopped up, and intended to be rolled or carried into heaps and burned; so that we should have ample and open space to watch as well as oppose any attack that might be made. But the Indians

did not give us the necessary time to carry our purpose into effect. This was our employment up to the beginning of February.

On Saturday evening, the 5th of that month, one *Sloan*, who, with his party, had been surveying the neighborhood, was attacked by what he called "a scattering party of Indians," who killed one of his men, took another prisoner, and wounded Sloan himself; who, with the remaining member of his party, sought to make his way to *Fort Washington*. But, wearied and faint with the loss of blood, and his wounds beginning to bleed afresh, he concluded to seek the nearer shelter to be afforded by our small stockade. He had no reason to apprehend the attack that was meditated upon it; and so secure was our little garrison, that on the next—Sunday—morning, *Lieut. Kingsbury* sent out four or five of our number to bury the dead man. In this feeling of perfect security, and with true soldierly hospitality, Kingsbury had yielded the narrow accommodation of his own quarters to Sloan, and having none for himself, passed the night in lively and jocose conversation with us, in our quarters. About the day-dawn on Monday, he went out, for a moment, and we immediately heard him clapping his hands and crying, "*Indians! Indians!*" We imagined this to be merely a ruse of our commander, to put us to the proof, since we supposed that the sentinel himself should have given the alarm. Whether that vigilant person was asleep, or not, at his post, I had forgotten to inquire, and am at present unable to say. Nevertheless, we sprang instantly to arms, without waiting, some of us, to put on our attire. For myself, I went out with nothing on but my shirt, and ran into the mill-house, a small building, in line with and not far from the block-house. This had no chinking or daubing. This motion of mine was prompted by curiosity entirely; for never having hitherto seen an Indian, I was most anxious to look upon the red man. To my unaccustomed vision, the whole face of the earth appeared, at first, to be covered with them, and their peculiar head-gearing of feathers and pigment, and the horrid jingling of the deer-hoofs and horns, tied around their knees, presented a spectacle of great interest, so much so as to make me forget, for the moment, that they were enemies and had invested us with a hostile intent. I perceived that they had surrounded our small fortress entirely on the land side, their flanks resting on the bank of the stream, on either side of us. Resting on my musket, I took a lengthened gaze at them, not for a moment thinking of firing at them. I had

been here but a few minutes, before one of the men, *McVickar*, came also into the mill-house. The Indians perceiving him, fired at and wounded him in the arm. Until that moment, I suppose, I had remained unseen by them; but now I began to receive some of their attention. A musket-ball, which came through the interstices of the logs, and whistling over my head, striking and upsetting a bowl of corn from a shelf above me, made me think it not expedient to remain longer there, even to satiate my curiosity. I made my way back to the block-house, and put on the remainder of my clothes. As soon as this was done, each man was disposed, by the commander, to the best advantage. My station was at the corner of one of the pickets, quite near the southeast corner of the block-house, at a port-hole, where, for all that day and the ensuing night, without being once relieved, I was to watch our enemy, and do him all the harm in my power. By the time I had taken my position, the Indians mostly had made the shelter of the logs we had left lying for them, and now commenced a parley. *Abner Hunt*, the member of Sloan's party, who had been taken prisoner on Saturday, with his arms pinioned behind him, was placed on a log, three or four rods from the pickets, while *Simon Girty*, who held the cord by which he was bound, lay sheltered behind the log. *Kingsbury* was mounted on a stump, and leaned on or over the pickets, not more than ten feet from the port-hole where I was stationed, and I was thus cognizant of all that passed between them. It is not necessary to detail all this. Enough, that no promise of quarter could be drawn from the assailing party, at least nothing definite, and therefore nothing that could for a moment suggest to the commander, or a single individual of the besieged, the idea of surrender. It was indicated, in the course of the parley, that *Simon Girty* was in command, that his brother *George* was also present, along with *Blue Jacket*, and some other chiefs, that they had present some five hundred Indians, and that some three hundred more were in the neighborhood, and that scouts were out and guarding all the way between us and Fort Washington, cutting off all hope of communication or relief from that quarter. The parley continued, I suppose, for two hours, at least. Each man of our little garrison had been ordered to fire, when he could take aim. And in execution of this order, every Indian, who, during the parley, incautiously left the shelter he had taken, was made to repent it. I know that during that period I

discharged my musket five or six times, and I recollect that we were cautioned not to waste ammunition, inasmuch as we had only twenty-four rounds per man in the fort. Girty complained of this mode of holding a treaty, when Kingsbury, with a big oath, and in a loud voice, swore he would punish the first man that fired a gun, but immediately added to us in a tall whisper, "Kill the rascals, if you can!" At the conclusion he told Girty that if they were five hundred devils, he would never surrender to them, and jumped down from his position. A tremendous volley of musketry from our foe immediately involved us all in smoke. This sport continued till late in the afternoon, when they informed us, by Hunt, that they were only drawing off for awhile for refreshment, but that by the time the moon went down, they would return and put every one to the tomahawk. We continued at our posts awaiting the event. The only refreshment we had during the whole time of the siege, was a few handfuls of parched corn, which the girls, *Sarah Hahn* and her sister, *Salome Hahn*, *Rebecca Crum*, and another, by name *Birket*, brought round to us from time to time. We had not even a drop of water, none being in the fort, and access to the river being deemed hazardous in the presence of so numerous a foe. The moon went down about half an hour to an hour after sunset, and our assailants were as good as their word, at least in returning to the onset. They gave us several rounds of musketry, then setting fire to the brushwood we had so carefully provided, when they possessed themselves of firebrands, which, to the number, I suppose, of more than five hundred, they projected, by means of their bows, into our stockade, and upon the roofs of our buildings, intending to set them on fire. This mode of attack continued to be used until midnight, without success, when they drew off to a short distance to execute upon their prisoner, Hunt, the vengeance that at parley they had denounced against him in the event of our failing to surrender. The scene of this horrid cruelty was between the fort and the artificial embankment, still to be seen, but which was then covered by the primeval forest trees. Here they stripped him naked, pinioning his outstretched hands and feet to the earth, kindling a fire on his naked abdomen, and thus, in lingering tortures they allowed him to die. His screams of agony were ringing in our ears during the remainder of the night, becoming gradually weaker and weaker till toward daylight, when they ceased.

At about daybreak, the Indians returned to the fort, and renewed their volleys of musketry. A little after sunrise, there was afforded to us the only relief we had hitherto experienced. It was merely a change of our stations. Those who, up to this time, were in the open air, were allowed to change places with those in the block-house, to resume our watchful vigilance at port-holes under its shelter, and near the remains of a decaying fire, which served to warm somewhat our chilled limbs. Into this block-house, the largest building within the stockade, were gathered besides, all the non-combatants of the garrison, numbering, women and children, and all, perhaps twenty-five or thirty. Taking my station at my port-hole here, I soon discovered an Indian standing sheltered by a small tree, who, at nearly the same time, saw that I had discovered and was watching him. He made use of various artifices, hoping to draw my fire and escape, but I was wary and attentive to him, and determined not to be balked. He honored me with five or six shots, without success. While my attention was thus engaged by my man, Lieut. Kingsbury also entered the block-house. He was immediately assailed by the cries and screams of the women and children, and by the anxious inquiry, "What shall we do?—is there no hope?" His response was, as I recollect, "Ladies, we must all suffer and die together. I know of no means of relief!" He began to state, in further explanation, that he had tried all his men, and tempted them with the offer of a pecuniary reward, to go to Ft. Washington to give the alarm and bring relief; but all in vain, as none would go. This declaration excited my attention, and, as *one* of the small garrison, I knew that I had not before heard of the matter, and I therefore immediately subjoined, "Why, Mr. Kingsbury, you have not tried me!" "True," said he, "I had forgotten you; will you go?" he eagerly inquired. "If you will, I will give you two half joes." "Not a cent, sir!" was my response; and the only condition I made was, that he should parade the rest of the garrison in front of the block-house, to see me either safely cross the river, or be killed or wounded in attempting it, as fortune or providence would order it. To this he immediately assented, and went to make a verbal correction, and to change the date of the letter he had already prepared to dispatch.

I suppose I was prompted to make the offer of myself, at the moment, for this forlorn hope, as it were, by the cries of the women and children I had just heard. However, I had no

preparation to make, and the men were drawn up, and I was ready.

This was probably between seven and ten o'clock, in the morning. The canoe was drawn up on the beach, so as to require some little assistance readily to get it off. I do not recollect who rendered me this assistance, which was to be done by being somewhat exposed to the fire of the besiegers, but Mr. Hahn assures me now that it was himself, then a boy of fourteen years, and his father, who gave me their aid for this purpose. But at length I was in the boat, alone, using my most active exertions in setting myself, by means of a pole, across the stream. I had need to be in a hurry, for I was in presence of five hundred hostile Indians, who were honoring me with their attention in the shape of a leaden shower of bullets, some of which whistled by me and spent their force in the water, and some struck and shattered, in a small measure, my frail "dug out," though, happily, none touched or injured my person. I reached the opposite shore, where I waited long enough to draw the canoe partly on the beach, when I seized my musket and put myself, as soon as possible, under the shelter of the underwood, and took my course down stream. I had been told that about two miles below the station there was a ripple, where I could easily recross, but if I missed that—since I could not swim—I should be obliged to make my way to *Symmes' Station*, at the mouth of the river, where I would be as far away from Fort Washington as at Colerain.

When I had gone, as I supposed, about two miles, I sat down and took a wary and cautious reconnoissance, in every direction, to see, if I might, some of the scouts that Girty told us were occupying the country between us and Fort Washington. After satisfying myself that there were none near me, I stripped myself and attempted to wade the river. I found the water at neck deep, and growing deeper still, when I was obliged to desist. I made a like attempt at two other places, but with similar success, in the cold water, filled as the river was with mush-ice, when I concluded that I had no alternative but to go to *Symmes'*. But, luckily, about two hundred yards from the place where I made my last abortive attempt to wade, I discovered the ripple, and was enabled to cross where the water was not more than knee deep. Without further obstruction, or being intercepted by Indians, I reached Fort Washington about four o'clock, in the afternoon, where my Captain,

Truman, accompanied me to *General Harmar's* quarters, and I delivered my letters. Captain Truman responded to the General's questions, who I was and to what company I belonged, with pride, as his, and that I was the youngest soldier in the army. An exorbitant dram of brandy, which Captain T. forced me to take, and a hearty meal, for which I had an appetite whetted by a long fast, as well as great exertion, having refreshed me, the General again sent for me, and inquired if I would return with the party to be sent to the relief of the station? I assented, on condition of being permitted to go mounted. This appeared reasonable, and was promised me. But since reinforcements were wanted, of a few militia from Columbia, I was permitted to take a night's rest.

Early in the morning, on a good horse, I accompanied the body, under the command of *Colonel Strong*, which reached Colerain between one and two o'clock, in the afternoon. We found that Girty and the Indians were in full retreat, having raised the siege some hour or two before. Colonel Strong pursued them two or three miles up the river, and came up with them, just as the last raft of the Indians were crossing the stream. As it was impossible to continue the further pursuit, they escaped.

The remains of the unfortunate Hunt, shockingly mangled and charred, had been, meanwhile, buried by the garrison.

Colonel Strong had been ordered to bring me back, with him, to Cincinnati, but in consequence of Lieutenant Kingsbury's remonstrances, I was allowed to remain for a few days, when our whole party was relieved and marched into Fort Washington. About all the promotion I received in the army, was shortly conceded to me, in being made Sergeant of our company.

Soon after this, Captain Truman's company was detached to garrison Fort Hamilton, under Captain Armstrong. But during the year, Truman was put in command of a company of Light Horse, and he took me with him as his Orderly. Our duties among the various outposts of our northwestern territory were pretty severe. When in that same year, General St. Clair marched out to chastise the Indians, our company of Light Horse composed part of the forces under his command. On the luckless day of St. Clair's defeat, I was present. On the evening previous, although I lay down to sleep with the rest of the force, I was from the, to me, unmistakable noise of the Indians in our vicinity, unable to compose myself to rest. My acquaintance, during my brief tour of duty at

Dunlap's Station, with the wonderful imitation, by the Indians, of the cries of wild beasts and wild fowl, had made me more wary than others. But perhaps my apprehensions were still more excited by a small amount of knowledge and experience I had gained on the day's march. A soldier, who had stepped aside for a moment, had been shot and killed, and I was detached, with a small party, to reconnoitre in that direction. I was astonished and alarmed by the evidence I saw, by their trail in the grass, of the immediate proximity of a very large force of the enemy. When, therefore, in the evening, at our encampment, Captain Truman ordered me to have the horses of our company hopped and put out into the prairie, I ventured to remonstrate, and told him if we did so, we should not have an animal left in the morning. Fortunately he heeded my remonstrance, and each man was ordered, instead, to cut sufficient grass for his horse, and tie him up near our encampment. The wisdom of this procedure was proved by the experience of Captain Snowden's company, on the left wing, who put out their horses, and consequently lost them all.

About an hour before day, while the soldiers were still slumbering, I perceived from the unusual yell of imitation of bears and wolves, and wild turkeys, that the Indians were in motion, and I conjectured that the attack was imminent. I therefore roused our company, on my own responsibility, and had our horses saddled and bridled, and ordered the men to mount. I then led Captain Truman's horse into the lines, and arousing him from his tent, explained to him my apprehensions. Doubting my information, he nevertheless told me, in answer, to have the troop mounted. "It is already done, sir." "Go and bring my horse." "It is already here, sir." He dressed himself, and coming out, mounted his horse and rode toward the tent of General St. Clair, telling me, meanwhile, to return to the troop and await him. Before his return, and in a very short period, the whole camp was aroused by the attack which was already made by the Indians on the militia in front, who came running into the camp in great disorder. We soon perceived that our encampment was entirely surrounded. As a ruse, the enemy beat a retreat. Our company, which was seventy-two strong, made at this moment a charge. The tramp of that number of horse made a very considerable noise; but perceiving an unaccountable degree of quiet to supervene upon this clatter, I turned my head to seek an explanation of the phenomenon, when

I could see no one but the Captain and myself: it seemed that we were entirely cut off. At all events, only thirteen men had escaped with their lives, as we discovered on our return into the lines. Seeing ourselves thus alone, I said to the Captain, "What is the use of continuing this charge alone?" This induced him to turn his head to examine the state of affairs in the rear. In doing so, he received a wound from a rifle ball in the left wrist, and as he was wheeling his horse, another struck him in the hips. Perceiving him to reel in his saddle, I seized his horse's reins in my left hand, and putting my right arm round his waist, I thus brought him back within the lines. Just as we were entering these, a third ball cut off the two middle fingers of his left hand. The only attention paid to me, was to cut away the plume from my helmet, and riddle my small clothes. As we entered the camp, I perceived some twenty or thirty of our horses without their riders, but all bridled and saddled, had run into the camp, and were congregated under an oak tree near the lines.

Just as I was putting my Captain under charge of a surgeon, orders came by an Aide-de-camp for a mounted Orderly to be sent to the commanding General. As I was the only mounted Orderly on the field, I was immediately dispatched and made my way to the presence of Gen. St. Clair. I was now directed to bear his orders from one part of the camp to another. While in the execution of this duty, I saw Colonel Darke and his horse both fall. I rode up to him and inquired if he was wounded? He replied that he had received a wound in the thigh, and that his horse was killed. I immediately dismounted, and assisted him into my saddle, and led him into the lines. I then ran to where I had seen the horses congregated, and mounted another. The order of which I now became the bearer, was that all should retreat to the centre; but as, in repeating this order, I was obliged to raise my voice, I found that the troops had anticipated my presence and retreated; so that, when at length I made my way through the smoke, I found myself alone and exposed, which made me hasten my retreat to the centre, and, as in duty bound, to the very presence of General St. Clair. I there heard Darke remonstrating with the General for bringing us all together thus to be shot down like a flock of partridges. Darke soon after exclaimed, "My brave fellows, follow me: we'll charge to the road, and make our escape!" No sooner said than

done. The whole army took to their heels, and the best man was the one who proved the swiftest.

I do not narrate many interesting incidents of the retreat. We made our way—I was with Captain Truman most of the time—to *Fort Jefferson*, where we arrived about the dusk of evening. Finding here no prospect of subsistence, we were forced to continue, after a brief delay, our way to *Fort Hamilton*. Capt. Truman, *Licut. Suydam*, and myself, each mounted, set forth together and in advance of the rest. But at what we supposed some ten miles distant from Fort Hamilton, my horse gave out, and I turned him loose, hoping to make better speed on foot. Captain Truman promised to have a horse sent out after me from the fort. But as I found out, the next day, his own horse gave out, and *Licut. Suydam* hastened on and sent the horse which had, at first, been destined for me, to bring in the wounded Truman. After pushing on till nearly given out myself, I betook myself to a log, a little way aside from the road, and soon fell into a sound sleep. On awakening in the morning, I discovered I had been aroused by the drums of the fort, which I joyfully found was close at hand. As I reached the opposite bank of the river, I descried my Captain, walking up and down, anxiously looking for me. He soon caused me to be ferried across, and, sending me to his quarters, he told me, after my long fast, fatigue, and exposure, to be moderate and prudent in the use of the refreshments I should find there. It was a saddle of venison, ready roasted, to which I was disposed to do ample justice, even to the prejudice of my health, had he not soon come in and compelled me to moderate, for a while, my appetite. In due time, and under his counsel, I made a hearty meal, almost the first food I had tasted for forty-eight hours.

Even at Fort Hamilton provisions were scarce; so much so that no rations could be drawn, and consequently from this place we were compelled to continue our retreat to *Fort Washington*. For this post, with about half a dozen men under my command, I started, after breakfast. We reached that evening a place, about six miles from *Cincinnati*, called *Ludlow's Station*, which we found had been deserted by the inhabitants, although the houses were already in the possession of some officers of our retreating army. Here, supperless, we fired a log heap, and lay down to take our rest. As other squads came in, other log heaps were fired, so that presently the whole scene was somewhat animated. Lying near

our fire, and courting repose, I presently heard a crackling in the bushes, near me, and began to wonder if it was possible, after the long distance we had retreated, and almost within call of Ft. Washington, that the Indians could be upon us. After a little further reconnoissance, I made out that the alarm proceeded from a fine, fat heifer, that came smelling its way toward our party. When it was within two or three yards, I fired at it, and it fell. Just at the same moment, it happened that a burning log, from a heap in our neighborhood, fell from its place on the foot of a sleeping soldier, and awakening him with the cry of pain, "O, Lord! O, Lord!" This created a universal panic, and all believed that the Indians were upon us, sure enough. The officers from the block-house, and the various neighboring parties, could be heard jumping, one after another, into the creek, to make their way into Cincinnati. My own party shared the panic, till I was able to re-assure them and explain matters, when, telling them there were now provisions at hand, they fell to and cut and broiled some steaks, and made a hearty meal, and then lay down and slept undisturbed, either by indigestion or Indians, till morning.

Fearing, in the morning, that provisions might prove scarce at Fort Washington, also, my men, after their breakfast, asked my permission to load themselves with as much of the fresh beef as they could conveniently carry, and thus laden, we made our way to the fort. Here *General Wilkinson*, espying us, eagerly inquired of me where we had passed the night? "At Ludlow's Station," was the reply. "Why were you not all massacred by the Indians?" "We are here now, at all events, General." We were then told that parties had been arriving, at short intervals, during most of the night, each bringing the same report, that the Indians were fallen upon Ludlow's Station, and making murderous havoc with the retreating forces.

The General made us relate all the circumstances, at which he laughed heartily, and ever after, as long as I remained in the army, whenever he saw me, he would recall the circumstances of the attack on Ludlow's Station, with great and mirthful gratification.

Such was the panic among the inhabitants of Cincinnati, that I could have bought the best lots in the city at five dollars each, but I did not think proper to make the investment.

I had continued, under a re-enlistment, in the army nearly six years in all. Our company was at one time under the command

of *General Wm. H. Harrison*, late President of the United States, and I was able to bear testimony, in my old age, as I felt called upon one occasion to do, to his bravery, humanity, and kind condescension to the poor soldier, even when yet a subaltern.

I was present, also, at the victory of *General Wayne*, at the battle of the foot of the rapids of the *Maumee*. By the kindness of General Wilkinson, after the treaty of *Greenville*, and the pacification of the *Northwestern Territory*, I obtained my discharge some two or three months before the period of my enlistment expired, at Fort Wayne, in August, 1795.

I again moved out to Ohio in 1801, and settled myself on the banks of *Rush creek*, where I have continued to reside ever since. In June, of this year, on visiting some relatives in Cincinnati, I yielded to their suggestion and re-visited the site of Dunlap's Station. No remains of our stockade could be seen, but I could identify it amid the cornfields, by the familiar bend of the river, on which it was located.

At the siege of Dunlap's Station, there was no cannon in the fort. The contrary I have seen stated, but it was a mistake. A small piece was sent to us a few days after the siege was raised, but during the attack we had nothing but muskets and rifles. It was also stated that a man was killed in the fort, but that, too, was an error; for there was none even wounded, save McVickar, in the mill-house, in the morning, as I have already related.

No person but myself was in the canoe crossing the river, on the occasion referred to. The contrary has been several times erroneously stated. Neither did any person leave the fort during the siege, either by night or by day, before I thus crossed the river.

I give Mr. Hahn's narrative in his own words:

My father's name was Michael Hahn. He was born in York, Pennsylvania, and removed to Tygart's Valley, Virginia, where I was born, March 1, 1777. My father removed, while I was a small boy, to George's creek, near Redstone old Fort, now Brownsville, on which stream he built a grist-mill. He afterward emigrated to Paris, Kentucky, and finally, in 1789, to Ohio. We first settled at Colerain, Hamilton county, on the Big Miami. I was a stripling of twelve years when we came to Ohio.

It was at this period that John Cleves Symmes had issued his proposals to settle the country between the two Miamis, but the surveys had not been regularly begun. John Dunlap, one of the

surveyors on the Miami, had laid off a town in what is now the northwest corner of Hamilton county, for settlement to all new comers, which he called Colerain, naming it after his native place, in Ireland, and which he professed to own. To this we came, our family consisting of father and mother, four sisters, and three brothers; two sisters and one brother being older than myself. Every settler located as much land as he was prepared to cultivate, and for the sake of guarding against the Indians, whose marauding parties led down as far as the Ohio, the families built their cabins together, and facing each other with the lower ends to the outside. These were connected together with pickets eight feet high, composed of small timber, split in half, sharpened at the ends, and set a sufficient depth into the ground.

Under some apprehensions of an immediate attack from the Indians, a detachment of troops, consisting of twelve or thirteen men, under command of Lieut. Kingsbury, had been sent out from Fort Washington. Orderly-sergeant Wiseman belonged to the party. The settlers, to the number of thirty, men, women, and children, all resided within the fort, which went by the name of Dunlap's Station.

Early in February, John S. Wallace, accompanied Abner Hunt, who was a surveyor, with two other persons, Sloan and Cunningham, on surveys on the west bank of the Great Miami. On the night of the 6th, they encamped there. Next morning, after they had been roasting venison, on which they breakfasted, they set out to explore the Miami bottoms above where the Colerain settlement, or station, was located. They had hardly left their camp seventy yards behind, when they were beset by the savages on their rear, who fired a volley of eight or ten guns. Cunningham was killed on the spot. Hunt, having been thrown from his horse, was made a prisoner before he could recover, and Sloan, although shot through his body, kept his seat and made his escape, accompanied by Hunt's loose horse. Two of the Indians pursued Wallace more than a mile and a half, but, owing to his uncommon activity, he made out to overtake Sloan, with the spare horse, which he mounted, and succeeded in crossing the Miami in Sloan's company. In his flight on foot, he was twice shot at, but without effect. His leggings had been getting loose, and at the moment of the first shot, he tripped and fell. Supposing him struck by the bullet, the Indians raised a shout, *Wah! hoo!* calculating, to a certainty, on his scalp; but

hastily tying his leggings, he resumed his flight and effected his escape. After crossing the Miami, Sloan complained of faintness from his wound, when Wallace advised him to thrust a part of his shirt into the bullet hole, to stop the flow of blood. Leaving the river, they directed their course to Cincinnati.

On the morning of the 7th of February, 1791, which was either Sunday or Monday, and just before daylight, the fort was attacked by a party of five hundred Indians, commanded by Simon Girty. His brother George was of the party. Our first notice of their presence was given by a large black dog, belonging to my father, which sprang from a stump, on the outside, upon the cabin, and began barking furiously. Had he not then given the alarm, the Indians would have been in at the gates, and every soul in the garrison been massacred, so secret and quiet had been their approaches.

The Indians, finding us prepared, as far as possible, commenced a parley with us, and for that purpose put forth Abner Hunt, whom they compelled to ask its surrender, which, in hope of saving his life, he did, in most pressing terms, promising that life and property should be held inviolate. But Kingsbury, who was in command, had no confidence in their promises.

Another application was made by the assailants, and the garrison threatened with massacre, if they did not surrender at once; but Kingsbury was inflexible, and the savages began their attack by a general discharge of rifles at the port-holes of the block-houses, which formed the corners of the fort, and where the effective force of the garrison was stationed.

The Indians were hidden behind standing and fallen timber, in front of the fort. This fallen timber, consisting of large logs and tree tops, had been cut down a short time previous, by the garrison, under the notion that it would promote their safety, in hindering a too nigh approach, without being seen, of an enemy; and if time had been allowed us to heap together the logs and limbs, and burn them, no doubt the cutting down of the timber would have been an advantage. But the Indians came upon us before we were prepared in this, as in other respects.

One of the Indians had got behind a tree, the fork of which was as high as his head, from which he fired into the port-hole opposite, as he had opportunity. At this point my older brother was stationed, and it proved a trial of skill and patience which would

get the advantage of the other. At last my brother got a shot at him, and broke his back. He fell, and lay there all day; but the Indians did not dare to come to his relief, or drag him off.

The attack on and defence of our fort, by rifle firing, continued throughout the whole day. When night came on, and gave the enemy an opportunity of leaving their hiding-places, burning arrows were fired upon the roofs. But the rain, which had fallen during the day and had frozen into sleet, as it fell after night, protected us from the threatened danger. During the night and at a late hour, finding that they could do nothing with us, they brought up Hunt, within a short distance of the fort, for the purpose of burning him alive. Accordingly, having stripped and fastened him to a log, they kindled a fire of dead limbs upon his belly, and commenced a horrid dance, whooping and yelling around the wretched object of their revenge. The screams of Hunt were plainly heard by the garrison, in the midst of these yells, for a long time, growing fainter as life expired. Such another night of horrors I had never witnessed, and never expect to; and I shall carry to my grave the impression it made upon my boyish memory.

During the night, or rather toward morning, William Wiseman, who had volunteered to make his way down to Fort Washington, for the purpose of obtaining aid from the garrison there, was accompanied to the river by my father and myself, and pushed off, by us, in a canoe, which was kept there by our settlers for the purpose of crossing the Miami, as they needed to do.

Wiseman returned, in the course of the next day, with a party from Columbia and Fort Washington, but the Indians had decamped, early in the morning, after doing all the mischief they could, by shooting all the cattle within their reach.

John Young, one of the settlers, was the first one of our garrison to leave the inclosure, to reconnoitre, and found that the enemy had actually left. During the siege, the women had been employed running bullets for the men of our party. To the uncommon darkness of the night, and the freezing of the rain, we no doubt owed our escape from the overpowering force of the savages.

A short time before the attack on Dunlap's Station, John Crum and David Gibson, two of our settlers, were captured by the Indians, who were always lurking about. Crum, who was a boy of thirteen, had gone to the woods for grapes, which, having given

his sisters, they returned for home. He left his hat, unfortunately, at the foot of the tree he had climbed to get to the grape-vines. A party of five Indians passed by, and observing the hat, cast their eyes up the tree, and bade him get down.

David Gibson was captured under my own eyes. He had gone out into the woods hunting, and just below the fort, perhaps a mile off, in the bend of the river, and clearly visible from the station, had shot a deer. This he hung up across the limb of a tree, and returned to get his horse for the purpose of taking the carcass home. The Indians lay concealed, not far off, behind a large tree that had fallen out of root. The horse smelled them, and broke for home, although tied to a sapling, which was attributed, by Gibson, to the presence of the deer. While he was gone to regain his horse, the Indians, knowing now where he would fasten the animal, placed themselves in ambush nigher hand, and after Gibson tied his horse more carefully, crept up, and surrounding him, made him their prisoner. There were eight or ten of them in number.

Gibson, while in captivity, married a white woman who had been made a prisoner by the Indians, and, together with his wife and Cram, was released, with various other captives, at the time of Wayne's treaty.

My brother and father both lost their lives afterward, and by Indian rifles. My brother had been taking a cow out from Fort Washington to Dunlap's Station. He was in company with a party of three from the garrison, and on their way out called upon Col. Riddle, of our city, then a blacksmith, and paid him three dollars on account of a bill he had owed at the shop for some time. "You had better give me more," jocularly observed the Colonel, "the Indians will get the rest." "Never fear," was the careless reply. In the course of two hours afterward, he had a bullet put through him, his scalp taken, and the residue of his money carried off. The party had imprudently fastened a bell to the cow, which enabled the Indians to surprise and massacre them.

My father was killed, April 25, 1792. He had been out with Martin Burkhardt and Michael Lutz, viewing some lots on what was called the Blue Bank, on the Miami, not far from the station, when they were fired on by Indians. They were all large, heavy Pennsylvania Dutchmen, and afforded easy marks to the savages. Lutz was killed and scalped on the spot, besides being afterward stabbed in different parts of the body. They shot Hahn through the

body, and followed him in sight of the garrison; but, finding they could not get his scalp, they fired at him a second time, and killed him. Burkhardt was shot through the right shoulder, and in an effort to clear himself, took to the river to swim, but was drowned, and was found at North Bend six weeks afterward.

August 14, 1792, John Macnamara, Isaac Gibson, jr., Samuel Carswell, and James Barrett, were bringing up a hand mill-stone, in a canoe, and at the *riffle* below the station, they were fired at by the Indians. Macnamara was killed, Gibson wounded in the knee, and Carswell in the shoulder; Barrett being the only one escaping without injury.

I close this narrative of Indian warfare with a statement given me by Garret Burns, at our last interview, in March, 1850. He is now, doubtless, no longer to be numbered among the living. No individual of that pioneer band, by whose labors and courage the broad and fertile fields of the west have been won from the savage beasts and more savage aborigines, the original occupants, has passed through a longer series of frontier service than Mr. Burns, as his narrative will clearly and fully exhibit.

I was born in *Burroughs*, county *Carlow*, *Ireland*, on the 24th of December, 1770, and am, therefore, in the eightieth year of my age. My grandfather, *Wm. Burns*, and the grandfather of *Robert Burns*, the great poet of *Scotland*, were brothers. William was a family name, and borne by my father, and Robert's father also, I believe. My grandfather was out, in 1745, with the Pretender, while his brother favored the opposite side. After the battle of *Culloden* had destroyed all hopes for the Jacobite party, my grandfather, with many others, was obliged to leave the country. He went over to Ireland, and settled in county *Tyrone*.

My father removed to county *Carlow*, after marrying there, and emigrated to *America*, in 1784, with his family, consisting of wife and four children, of whom I was the youngest. The family remained in *Maryland*, near *Fredericktown*. I had learned the hating business at *Baltimore*, and, having a desire to see the west, concluded to engage in that business beyond the mountains. I left *Baltimore* in 1788, worked at *Catfishtown* now *Washington*, and *Pittsburg*, *Pa.*, during the winter and the ensuing spring. I came to *Bourbon county*, *Ky.*, in 1789, and in that and *Campbell* county have now resided more than sixty years. In 1790, I enrolled myself, at *Paris*, *Ky.*, as a substitute for a man named

Jacoby, who had been drafted, and his mother being a widow, and having no other son, could not spare him from the farm. I received twenty dollars as substitute, and was to get three dollars per month pay as militiaman. The Kentucky militia, four hundred strong, commanded by *Maj. Hall*, marched down to where *Covington* was since built, waiting the arrival of *Col. Paull*, with the *Pennsylvania* troops. As soon as these arrived, we crossed the *Ohio*, and the whole corps being under the command of *Colonel Hardin*, we started up the *Little Miami river*, in advance of the regulars, four or five hundred strong, and commanded by *General Harmar*, himself. They overtook us the day after leaving Cincinnati. When we got within twenty or thirty miles of the *Maumee* towns, where we had just encamped, General Harmar detached five or six hundred men, under the command of *Hardin*, *Hall* being second in command, for the purpose of destroying their towns. We started off, sun an hour high, perhaps, and reaching the towns, found that the Indians had evacuated their cabins, and set them on fire. They were still burning when we got there. These towns were principally in a great bend of the *Maumee*, which river is formed of a junction of the *St. Mary's* and *St. Joseph's*, the latter coming in from the north. By this bend the *Maumee* is brought round nearly to the *St. Joseph's* itself. As we crossed the *Maumee* toward the *St. Joseph's*, there were two or three mounted Indians visible, at whom we fired, but at too great a distance to be of any effect. We then took possession of the gathered corn, which was in heaps, the husks left upon the corn, and carefully plaited through each other, like onions on a string.* A messenger was dispatched to *Harmar*, with word that we had taken the towns and found provision enough to last the whole army for several days.

On the third day, the residue of the army, with its three or four pieces of cannon, came up. *Harmar* then sent out detachments to burn and destroy the corn in the neighboring towns. These were beset on their return, in the night, by the savages, and nearly one hundred killed. Twenty-six out of thirty of the regulars, alone, being of that number. This was the affair in which *Captain Armstrong* lay out all night, in a pond of water, with his head only out. We lay there all next day, the cannon firing every fifteen minutes,

* This was done, no doubt, to enable it to be carried, if necessary, across the backs of the Indian ponies.

to let the stragglers, who had dispersed in the defeat, know the direction and proximity of the camp. On the 21st of October, being the third day, we marched back eight miles. Hardin had left a few scouts at the deserted towns to report to him any signs of Indians. These reached camp that night, with word that there was a large body of the savages, who had returned to the villages, soon after he had left the ground. Harmar then directed Hardin to raise a party to attack them. This was made up of fourteen men from every company, as an average, and *Major Fountain*, with his cavalry, and *Major Wyllys* commanding some sixty-five regulars. *Hall* and *McMullen* commanded the Kentucky, and *Major Truman* the Pennsylvania militia. Hardin had, of course, charge of the whole detachment. All started together, but when we got near the towns, we separated, in order to surround the Indians supposed to be there. McMullen, with his party, missed their way, and did not get up to participate at all in the fighting that took place. As we approached the villages, two or three Indians, who had been burying one of their number, killed the day before, were seen and fired on. This raised a general alarm among the savages, who rallied in great force and gathered in our rear, as we were able to see them along the St. Joseph's for more than a mile in distance. Some thirty or forty of the Indians had been hid in a hazel patch, from which, as we approached it, they fired on us. We fired in return, rather at random, having nothing to guide us but the smoke of their guns. Major Fountain, who was at the head of the column with his cavalry, gave orders to charge, but was not obeyed; only two of his troopers following him. He was killed, and the men wounded, and all three of the horses shot down. The Indians in the hazel patch then broke. By this time, the Indians in the rear, supposed to be nine hundred strong, came on, whooping and yelling like so many incarnate devils. Wyllys formed his regulars in the hazel patch alluded to, although advised and even directed, by Hardin, to cross the St. Joseph's, in order to obtain an opportunity of treeing. Hardin, with the rest of the command, crossed the river, leaving Wyllys to his fate. As soon as the Indians came up to the hazel patch, the firing commenced by Wyllys, and was kept up, for a few minutes, with great spirit, until but eight or ten of the regulars were left alive, who finally made their escape. Wyllys was killed early in the engagement. I saw him fall from his horse. By this time, Hardin, with his troops,

were ranged up and down the west bank of the St. Joseph's, every man taking a tree that could find one, and firing on the savages across the stream, which was but of small breadth, although deep to its size. In this way we drove the Indians back three or four times. At last they divided, part crossing above and part below us. They attacked us with the utmost fury, rushing on the very rifles, tomahawk in hand. Our troops stood their ground until Hardin gave the word to retreat, saying, "Let every man do the best he can to escape!" Just before this, my right hand man, *Wm. Arnold*, ensign in *Captain Caldwell's* company, received a ball in his thigh, and exclaimed, "The Lord have mercy on me!" He fell, and an Indian ran up, tomahawk in hand, to brain him. He was within a few steps of Arnold, as I fired and shot him through the breast. I saw him fall, pitching on his face. Such was the noise of the fight, that it was only by the smoke of my rifle that I knew it to have been discharged. I assisted Arnold to mount behind a man riding off from the battle, and he effected his escape. He had been a neighbor of mine in Bourbon county, and remained such to the day of his death.

I also helped another of my neighbors, one George Sutherland, a young Scotchman, to a horse, when his right arm had been broken in the fight, and he had to be lifted on the saddle.

By this time the whole body of our troops separated and escaped as fast as possible. As to myself, I had run nearly a mile, at full speed, and was almost exhausted, when a horseman galloped by. On the instant I seized the horse, a fine iron gray, by the tail, and held on in spite of the owner's remonstrances and threats, he having nothing but a light switch in his hand, and I holding on for life or death. When I got into camp, I was so stiff that I had to be greased and roasted by the fire for some time, before I could stand on my feet.

Of the four hundred that comprised the detachment, it was reported that little more than one-half escaped the battle and the pursuit. The carnage, in proportion to their numbers, was principally among the officers.

The stragglers got back that evening, and the next day McMullen and Hall proposed to return and bury the dead, but Harmar had no disposition to risk any more Indian battles.

We returned, without further molestation, to Fort Washington, where, with the rest of the Kentucky militia, I was discharged.

In the fall of the ensuing year—1791—there was another draft made by the United States, on *Kentucky*, for militia, for the purpose of enforcing the strength of an expedition of regulars and *Pennsylvania* militia, under the command of *General St. Clair*, to chastise the hostile Indians. At this period I was working at the hatter trade—my regular business—near *Ruddle's Mills*, not far from *Paris*, and escaped the draft. The number originally drawn fell short of what had been assigned to the State, and seven less than the quota of *Bourbon* county, and in a second draft made to complete the deficiency, I was one of the number drawn.

The second draft rendezvoused at *Craig's Mills*, at the edge of *Georgetown*, Ky., where we waited two or three days until our entire force, of about seventy men, had collected on the spot. *Capt. Ellis* took command of the detachment, and marched us off to Cincinnati. I was directed to act as Sergeant, having had some experience, compared with the rest, in Indian warfare.

We marched by way of *Fort Hamilton*, which St. Clair had but recently constructed. We encamped in the woods, and found game abundant, such as bear, deer, and turkeys. We followed hard after St. Clair, until we reached *Fort Jefferson*, where we found the army employed in building it. Here we staid a week or more. Two of the six monthsmen, who were from Pennsylvania, went out hunting, and on their way back were fired on by Indians. One was killed on the spot, the other survived to get into camp, where he died. A party set out to hunt the other, and after a tedious search, found him lying in the woods, not merely scalped, but the entire skin of the head, down to the ears and the temples, and back as far as any hair could be found, was stripped off. I also saw three men hung here, one an Irishman, named *Johnson*, for shooting his Captain, and the others, *Targee*, a Frenchman, and *Simpson*, a Virginian. The last two had been caught deserting to the Indians. They were all hung on the Sunday evening after we reached Fort Jefferson. There had been another fellow engaged with the deserters, who turned states' evidence, and was left in irons at Fort Jefferson when the army left it. What became of him no one could tell, but he was never found after the army returned from the battle-field of the 4th of November.

As soon as the fort was completed, we left a garrison of five-and-twenty men, and pushed on into the wilderness. We marched ten miles that day, and encamped. A party of two hundred

Pennsylvanians were detailed to cut a road a distance of twenty miles, and a party of Kentuckians, of equal force, was dispatched along to guard the first party. The road was completed on the second day, the whole detachment being on half rations the whole time. On the third day, pack-horses with flour, and more than a hundred head of beef cattle, reached camp, but very little to our benefit, for next morning the battle took place, and all these supplies finally became plunder to the savages. On the morning of the 3d November, a party of fifty or sixty Kentucky militia started off for home, determined no longer to endure the hardships of the campaign on scanty food. St. Clair sent a part of his first regiment of regulars, who not only failed to overtake the Kentuckians, but were not able to return in time for the battle. During the whole night of the 3d, the Indians and the sentinels kept up a scattering firing, and just as day broke, *Capt. Lemon*, officer of the guard, and *Lieut. Briggs*, his second in command, went out to see what had led to the firing. They had hardly got out of sight of the sentinels, when they were fired on. Lemon was killed on the spot, but Briggs, although mortally wounded, contrived to get into camp. The Indians rushed into our lines, the guard having broke on their approach. The camp of the militia was on the west side of a creek, of which the regulars occupied the other side, and on higher ground. The militia made but a feeble resistance, and *Colonel Oldham*, who attempted to rally them, was killed in the effort. The militia broke and fled across the creek to a camp of the regulars, and through their line, before they could be stopped. *General Butler* formed his troops as promptly as possible, *Captain Ford* being in charge of two or three pieces of artillery. The Indians treed on the banks of the creek, under cover of the hill, and of heavy timber between, and picked off the regulars exposed to their rifles, without any opportunity of these seeing their enemies. Great slaughter in our lines was the necessary consequence. The artillery was left without men to serve it, and the regulars were nearly all cut off. The Indians then rushed up and took the cannon. General Butler rallied about two hundred and fifty regulars and militia, and ordered a charge with bayonets and rifles. The Indians then fled, but returned as soon as they had re-loaded, and drove us off from the cannon, which they then threw off the carriages. The Indians, by this time, had entirely surrounded the camp. *Maj. Clark* ordered a retreat, crying, "Fill up the ranks! fill up the ranks!" until it

was found we had no men to fill the ranks. A general flight ensued, the savages following us five or six miles. I was in the head of the flying column, and saw nothing more of the Indians afterward, although their screaming and yelling might be heard for miles.

We reached Fort Jefferson, which we found abandoned by our troops, who had heard of our defeat, and fled to escape the pursuit, which they expected would follow up to the fort. St. Clair made his escape on an old pack-horse which could hardly be pricked out of a walk.

Major Ferguson, Captain Ford, and Colonel Gibson, were all killed in the beginning of the battle. General Butler was killed in the charge spoken of. Sixty-four commissioned officers were killed or badly wounded in this disastrous affair.

St. Clair and his officers fought gallantly, but the whole affair was miserably mismanaged in relying upon musketry and artillery against Indians. Another error was in clearing out the brush, through the camp-ground, affording the rifles of the Indians full aim and unobstructed range.

That night, myself and two others got lost in the woods, and kindled a fire to warm ourselves. We had hardly done this, when we heard a great crackling among the dry, frosty timber, and not knowing whether it was caused by friends or enemies, we took to our heels. We traveled all night through the swamps. I steered my course by the *Seven Stars* till daybreak, when I discovered men on the road who had been traveling all night also. On the evening of next day, we reached Fort Hamilton, and the next day Cincinnati, where we staid nearly a week to allow the stragglers to make their appearance. Here we were honorably discharged, and made our way home to Kentucky, at least so many of us as belonged there.

My next experience in Indian warfare, was in 1792. In June or July, of that year, *General Charles Scott*, of Kentucky, made a call upon his fellow-citizens for volunteers, to engage in an expedition, of mounted men, against the hostile Indians, on *Eel river*, who had been recently breaking up the frontier settlements, by stealing horses and murdering the inhabitants, as opportunity served. The troops rendezvoused at the mouth of the Kentucky river, at which point flats were prepared to take the volunteers, with their horses, across the *Ohio*. Nearly one thousand men

assembled for the purpose. We were formed into companies of from fifty to ninety men, as neighbors' districts rendered it convenient; Scott being in command of the whole. *Major Hall*, with whom I had been serving in *St. Clair's* expedition, was again in charge of one of the battalions, and I was again under his orders. *James Wilson* was Captain of our company. Each man took provisions for thirty days, composed of parched corn, maple sugar, bacon, and flour, adding probably fifty or sixty pounds to the burden of each horse. The men were all armed with a rifle and butcher-knife, and a number had tomahawks. We crossed the Ohio, and proceeded to *White river* without accident or adventure. The river had been known to be so full as to swim the horses, and General Scott detached a party of fifteen or twenty ahead to prepare bark canoes of hickory, in which to cross the riders, with the baggage, while the horses swam over by being held by the bridles. Some of the volunteers swam their horses while on their backs. Two of the horses and one of the riders were drowned in the passage, which cost us a whole day.

We reached the Indian towns, and were discovered in our approach by some of the Indians, on foot, who ran in to give the alarm, but being mounted we got in as soon as they did. Most of the warriors fled, crossing Eel river, toward another Indian village in sight of the first. They fired on us from the tops of their cabins, but at too great a distance to do us injury. The fire was returned by us, with larger and more effective rifles, which soon dislodged them, driving them into the woods. We made more than twenty prisoners, old men, women, and children, who we brought in to *Cincinnati*, and left with the garrison there. I saw them prisoners still there, in 1793, when *Wayne* had reached Cincinnati. We burnt the cabins and wigwams in their villages, and destroyed the corn, which, at this period, had begun to tassel out. The cabins were made of small logs, and had been built by the squaws. The wigwams had been built by driving two or more stakes, with crotches at the upper end, according to the desired length of the wigwam. Across these stakes were laid poles and bark, which was suspended by the middle on the pole to hang down on each side to the ground. Some of this bark was four feet wide. The bark is taken off in the spring, when the sap rises, with great ease; and at other seasons the Indians cut off the bark sufficiently to admit boiling water being poured above the course they desire to

strip off. Then making an incision lengthwise, they begin peeling and again applying boiling water, again peel until the entire bark is taken off. The bark, when peeled, is laid open on the ground and pressed flat with stones, until it keeps its shape.

Our troops separated before we reached Cincinnati, those that lived in the southern and western parts of Kentucky, crossing at the mouth of that river, and those belonging to our neighborhood, making our way up *Dry Ridge*, on the present road from *Covington* to *Lexington*, Ky.

In 1793, I was again called into service, as a mounted volunteer, at a dollar a day for self and horse, having to find our own arms and ammunition. I was attached to *Maj. Notley Conn's* battalion, which was raised in the vicinity of *Paris*, and my Captain was *Nathan Rollins*. The general rendezvous was *Newport*, Ky., which had just been laid out as a town. Here we met three battalions more, one under *Major Russell*, attached with ours to the regiment, commanded by *Colonel Todd*. The other regiment was under *Colonel Barbce*. General Scott was again in command of the Kentucky troops. We started about the 1st of October, and marched out to *Greenville*, where we found General Wayne, in an encampment of about ten acres. We encamped beyond, at the edge of a prairie.

From a variety of causes, the campaign had been so long delayed, that General Wayne concluded to defer active operations against the enemy until next year. He therefore discharged Scott with his volunteers. In lieu of going home direct, Scott invited six hundred of those who were best equipped for service, to accompany him in an expedition to scour the Indian country, and dismissed the residue. Being well mounted, and feeling myself capable of going through as much as any other man in the campaign, I volunteered to make one of the party. We started off from *Greenville* and rode on till we came to *White river*, and down that stream till we reached the *Wabash*. We had, unfortunately, no provision with us at leaving *Greenville*, and had to resort to hunting for subsistence. Our firing at the game served to put the Indians on their guard, and they kept out of our way. We found several camps, but they had all been deserted by the savages. We discovered, afterward, that, instead of our pursuing Indians, they were following us; for every night they had endeavored, as we were told subsequently, to steal our horses. This they were

unable to effect without giving an alarm, as we tied our horses up every night within the camp. In this way we scoured the whole country and finally returned without accomplishing anything.

While we were out, however, a party of these Indians had made an excursion on *White's Station*, on *Mill creek*, a few miles from Cincinnati. Here they killed several persons, but were finally driven off by the determination and spirit of *Captain Jacob White*, and others, who defended it.

We were mustered out of service at Cincinnati, and returned home without further loss of time.

In July, 1794, Gen. Charles Scott issued an address to the Kentucky volunteers, inviting an enrollment of two thousand mounted men, which he had pledged to General Wayne as the contribution of that State to the expedition assembling at Cincinnati, and intended to chastise the savages, whose success in the Harmar and St. Clair campaigns, had rendered them more than ever indisposed to treat for peace.

The whole Kentucky quota rendezvoused at *Georgetown*, and were inspected by Captain Edward Butler, a brother to General Richard Butler, who had been killed at St. Clair's defeat. We assembled again at Newport, the army of Wayne having, as already stated, encamped the previous year at Greenville, where it still lay. We marched on to this place, accordingly, and without any adventure. We found that Wayne had already left, and following on, we overtook the main body at St. Mary's. We went on thence to the Auglaize, where we found the relics of burning cabins, which the Indians, who were apprised of Wayne's approach, had abandoned and set fire to. We kept on the forks of the Auglaize and Maumee, where the principal villages were. Here we found the cabins also destroyed by the Indians, who had made their escape by water in canoes.

At this point Wayne halted his forces and built *Fort Defiance*. He dispatched a flag of truce to the Indians, by a man named Miller, who had been captured by the Indians while a boy, and was raised among them, although recently captured by a scouting party of Wayne's. The Indians returned word that they must assemble their chiefs, and would give him an answer in ten days. Wayne, however, had pushed on immediately after Miller's departure, and about half-way between Fort Defiance and the foot of the rapids, we met Miller returning. On being asked, "What news?" he

replied, we might expect a hard fight, for the Indians were gathering in great force, several parties having come in during his short stay with them, and more were hourly expected. We advanced without opposition as far as *Rocher au bois*, a rocky place in the Maumee, covered with cedars, where Wayne halted and encamped, fortifying his camp with entrenchments of ditches, two feet deep, upon the earth thrown out of which, timber had been carried, and the loose brush from the inside thrown upon the outside. In the morning we moved on to the battle-ground of the 20th of August, known by the name of the *Fallen Timbers*. This was so called from the quantity of trees thrown down in a recent hurricane, and had therefore been selected by the Indians as a suitable place to make a stand against our army. The fallen timbers extended from the river, north and south, nearly a mile across our front, how much farther I cannot say, nor is it of importance. But for that whole distance the Indians were hid behind the trunks of the trees wherever they could find hiding-places. In the early part of the night before, a party of the Indians had approached the camp to reconnoitre, but being discovered by the out-posts, the Indians were fired on by the whole line of sentinels and driven off.

I had an adventure of my own, connected with this, which I will now relate. When I left Georgetown, I had a conversation with *John Hinkston*, son of the man after whom one of the forks of *Licking* was named. Hinkston and I agreed that we would bring back a scalp or lose our own. On the night referred to, Hinkston was detailed for guard, and objected to go, alleging that it might be the means of his having no share in the battle which no doubt would take place in the morning, and which he was resolved to have a hand in. He proposed to me to take his place, offering me, if I would do so, all the money he had in his purse. I took his post accordingly. In the morning, Hinkston reminded me of the engagement we had made in Georgetown, and said we should soon be in circumstances to carry it out. We marched on some four or five miles, our front battalion formed the guard of the left wing, the army being spread out, almost a mile in breadth, under the apprehension of being outflanked by the Indians.

A battalion of spies, under the command of *Kibby* and *Baker*, advanced in front, to bring on an engagement, if possible, as we expected, what proved to be the fact, that the Indians were hid behind the fallen trunks and limbs of trees. Our battalion had

been pressed so far to the left that we had not much of the timber immediately in our front. A portion of the Indians being *Wyandotts*, who had attempted to outflank our troops, in the movement, found themselves in front of our battalion. As they approached us, they raised the yell, which, being a low guttural sound, was mistaken, by those of us who had never heard it, for the sound of little bells. "What's that?" said some of our boys. I replied, having heard it in Harmar's and St. Clair's engagements, "You'll soon find out."

The Indians then fired, and we returned the fire, rushing on them as they treed to re-load. I singled out one Indian, and, leveling my rifle, fired. I was behind a tree, as he was, and struck him before he had the same chance at me. He ran off, although wounded, and I saw him no more. I re-loaded, and, rushing on again, I discovered an Indian in a sink-hole, his body, from the hips up, being exposed to view. He had fired, and while he was loading his gun, I drew up against a hickory sapling, exclaiming, "Your life, or mine!" and blazed away. The roar of rifles was such that I did not hear my charge explode, but knew, from the blaze that the priming had taken effect. I saw the Indian fall, and rushing on, seized him by the hair to take his scalp, but finding that I had lost my hunting-knife, I snatched his from his belt. His was a brand new scalping-knife, red handled, and the blade was as bright as when it came into his hands. He caught the knife by the blade, but I wrenched it from him, cutting off three of his fingers as he let it go. I then put my foot on him to pin him down, and took the scalp off. He gave but one quiver, and the breath left his body. I took his gun, a beautiful rifle, and broke the stock of it across a log. I then took up my own rifle, and re-loaded as quickly as possible.

The battle was continued, for a short time, with considerable spirit on our right, where the main body, on both sides, were. In the meantime, our men at the left were driving the *Wyandotts*, who kept up a retreating fire. Presently the whole line of the Indians broke, and they fled at full speed. Our troops pursued them a full mile up to the British fort, called Maumee, on the north side of the Maumee river, and about a mile below where Fort Meigs was afterwards built, upon the opposite side. They had expected admittance into the fort, but Colonel Campbell, the commander, directed the gates to be kept fast. Had the Indians been

admitted, nothing would have prevented Wayne from storming the fort. So complete was the discomfiture and sudden the dispersion of the Indians, that General Barbee, with the second line of our army, which was three or four hundred yards behind us, never got into the engagement. As for me, I fired but twice. I could have got another shot, but one of our men, Frank Smith by name, raised up between me and my object, just as I was about to fire, and had a narrow escape of it. *Carmack* and *Jackson*, two of my Bourbon county neighbors, were alongside of me. A bullet struck *Jackson*, and he never again rose from the spot. I left him to the care of *Carmack*, and pursued the flying enemy. My Captain received two balls, one in the groin, but recovered after a lingering illness.

Our army returned to the Fallen Timbers, to attend to the killed and wounded, and encamped on the ground, placing sentinels, of which I was one, to guard against any surprise by the Indians, who, it was supposed, might rally. While thus engaged, I saw two of our men driving up before them, to that point of the camp where I stood, a Frenchman they had taken prisoner, disguised as an Indian. I could not conceive what was meant by this, and hailed him, to which he replied by bowing repeatedly. He finally accosted me, in pretty good English, begging me not to shoot, as he was a prisoner. The men who brought him in, damned me, afterward, for not shooting. I asked them if a prisoner was to be shot, why did they not shoot him themselves? It was, however, very well we spared his life, for we dispatched one of the prisoners, an Indian squaw, with a letter to his brother, at *Detroit*, which was the means of bringing him on, together with three persons who had been made captives by the Indians, in some of their excursions, and who were given in exchange for this Frenchman.

During the battle and before the Indians had given way, I saw a man lying dead near me, who, I supposed, was one of my comrades, and remarked, "There lies one of our brave fellows." "Look at his face," was the reply. I turned him over and found that his face was all over painted. In doing this, I noticed his breech-clout, which was stuck so thick with silver brooches that they touched each other, probably not less than one hundred and fifty. I tore it off him, but lost it afterward, my attention being engaged in loading and firing; and when I inquired for it subsequently, somebody else had picked it up, and would not surrender it.

After my tour of guard was over, on returning to camp, I saw my Captain lying in the hands of the doctor, stretched out on a blanket. He grasped my hand and begged me not to forsake him, in case of a fresh attack, but to put him on a horse. I promised him that I would do so. While we were talking, General Wayne himself rode up, and noticing the sword lying by, inquired, "What officer is that?" He was told, and dismounting, gave his horse to be held by one of the men, and examining the wound, told *Capt. Rollins* that he was a live man yet, as the bullets, although they had shattered the hip and back-bone, had missed the vitals. He then ordered him to be taken, on a litter, to *Camp Deposit*, where we had left our baggage, pack-horses, etc., in charge of a party of the troops.

We then retraced our steps to Fort Defiance, and halted there a few days, when we marched up the Maumee river to the old Maumee town, at the junction of the St. Mary and St. Joseph. Here we commenced building a large fort, on which four or five weeks' labor was spent, and which was named after Wayne himself. The fort was built of the largest kind of oak logs, and as the draft-horses had been broke down in the campaign, the wagons on which the logs were loaded were hauled in by men—thirty to a wagon—with officers as drivers. The walls of the fort were double, the space being filled up with earth, afforded by a ditch dug outside, which was fourteen feet deep, and as much wide. All this work, or nearly all, was done by regulars, the volunteers being employed in escorting pack-horses and provisions from Fort Hamilton or Fort Recovery.

After Fort Wayne was completed, our term expired, and we left for home, and were read out of service at Cincinnati, on what is now the public landing, but which was then the ferry, opposite Licking.

Privations and Sufferings of the Early Settlers.—It is hardly possible for those who now reside in Cincinnati, in the enjoyment of the comfort and luxury which money can purchase, and the plenty which pours in by wagons, steamboats, railways, and canals, to realize the destitutions and privations of the first settlers, before they had got their farms cleared, and the cleared land under cultivation and fence.

At that period the condition of the great thoroughfares of the west—of the route across the Allegheny mountains, especially—

was such as to forbid the emigrants taking any articles but those of indispensable necessity; for a six horse road wagon, at a slow gait, could not carry more than what would now be considered, over a macadamized road, a load for two horses. When the pioneer westward had reached Redstone or Wheeling, the difficulties of transportation were not much lessened. There were no wagon roads through the intermediate country, if the hostility of the implacable savage had permitted traversing the route by land in safety; and the family boats which carried the settlers down were so encumbered with wagons, horses, cows, pigs, etc., as to have little room for anything else but a few articles of family house-keeping of the first necessity. On reaching their destination, cabins had to be erected, the land cleared and cultivated, and the crop gathered in, in the presence, as it were, of the relentless savage, who watched every opportunity of destroying the lives of the settlers, and breaking up the lodgments as fast as made. In the meantime, supplies of food, not yet raised on the improvement, had to be obtained in the woods from hunting, which, in most cases, was a constant exposure of life to Indian enemies.

Under these circumstances some general idea may be conceived of the sufferings and privations which those endured who formed the van-guard of civilization, and prepared the way for the present generation to enjoy the fruit of past labors and sufferings. But it is not so easy, without some specifications such as I shall furnish here, to realize the nature and extent of the privations of individuals who, in many cases, abandoned comfortable homes and the enjoyment of civilized life at the call of duty. Especially was this the case in respect to several of the pioneer mothers. A few notes from the recollections of one of the survivors, probably the only one of the party who landed with Major Stites at Columbia, a venerable lady recently deceased, whose family has borne a conspicuous part in the civil, political, military, and religious history of the Miami Valley, will possess my readers of a more distinct idea of these sacrifices and privations, than they could otherwise acquire. These were given me in 1846.

My informant was born and brought up in New York, her parents being in prosperous circumstances. Her husband, who was a surveyor, had been for some time in delicate health, and concluded to accompany Maj. Stites to his settlement at the mouth of the Little Miami. At this place, where they landed on the 18th November,

1788, and to which the settlers gave the name of Columbia, two or three block-houses were first erected for the protection of the women and children, and log cabins were built, without delay, for occupation by the several families. The boats in which they came down from Limestone being broken up, served for floors, doors, etc., to these rude buildings. Stites and his party had riven out clapboards, while they were detained at Maysville, which, being taken down to Columbia, enabled the settlers to cover their houses without delay. The fact that the Indians were generally gathered to Fort Harmar, at the mouth of the Muskingum, for the purpose of making a treaty with the whites, contributed also to the temporary security of the new settlement. Little, however, could be done beyond supplying present sustenance for the party from the woods. Wild game was abundant, but the breadstuffs they took with them soon gave out; and supplies of corn and salt were only to be obtained at a distance, and in deficient quantities, and various roots, taken from the indigenous plants, the bear-grass especially, had frequently to be resorted to as articles of food. When the spring of 1789 opened, their situation promised gradually to improve. The fine bottoms on the Little Miami had been long cultivated by the savages, and were found mellow as ash-heaps. The men worked in divisions, one-half keeping guard, with their rifles, while the others worked, changing their employments morning and afternoon. My informant had brought a looking-glass, boxed up, from the east, and the case being mounted on a home-made pair of rockers, served for the first cradle in the settlement. It had previously been set across a barrel to do duty as a table. Individuals now living in Cincinnati were actually rocked, during their infancy, in sugar-troughs.

It was with difficulty horses could be preserved from being stolen, by all the means of protection to which the settlers could resort. In the family to which this lady belonged, the halter-chains of the horses were passed through between the logs and fastened to stout hooks on the inside. But neither this precaution nor securing them with hobbles, would always serve to protect horses from the savages. On one occasion, a fine mare, with her colt, had been left in the rear of the house, in a small inclosure. The mare was taken off by Indians, they having secured her by a stout buffalo tug. It appears they had not noticed the colt in the darkness of the night. As they rode her off, the colt sprang the fence after

the mare, and made such a noise galloping after, that, supposing themselves pursued, they let the mare go, lest she should impede their escape, and the family inside of the house knew nothing of the danger to which they had been exposed, until the buffalo tug told the night's adventure.

On another occasion, several families, who had settled on the face of the hill, near where Colonel Spencer afterward resided, at a spot called Morristown, from one Morris, the principal individual in the settlement, had hung out clothes to dry. Early in the evening, a party of Indians, prowling around, made a descent and carried off every piece of clothing left out, nor was the loss discovered until the families were about to retire for the night. Pursuit was made, and the trail followed for several miles, when, arriving at the place where the savages had encamped, it was found deserted, the enemy being panic-struck, and having abandoned all to effect their escape. The plunder was recovered, but not until the Indians had raveled out the coverlets to make belts for themselves.

But many of the settlers encountered more serious calamities than loss of property. James Seward had two boys massacred by the savages, and James Newell, one of the most valuable of the settlers at Columbia, shared a similar fate. Hinkle and Covalt, two of the settlers on Round Bottom, a few miles up the Miami, were shot dead, in front of their own cabins, while engaged hewing logs.

In November, 1789, a flood occurred on the Ohio of such magnitude as to overflow the lower part of Columbia to such a height as first to drive the soldiers, at one of the block-houses, up into the loft, and then out by the gable to their boat, by which they crossed the Ohio to the hills on the opposite side. One house, only, in Columbia, remained out of water. The loss of property, valuable in proportion to its scarcity and the difficulty of replacing it, may be readily conjectured.

Honor to the memories of those who, at such cost, won as an inheritance for their successors the garden-spot of the whole world!

The first settlers suffered greatly for provisions, before the crops of their second year produced food in abundance, subsisting on short allowance of corn, which was pounded or ground into hominy in hand-mills. They were thankful, in those days, if they could only procure corn enough. Many of the families at Columbia subsisted on the roots of the bear-grass. Jesse Coleman, to whom

I have already referred, tells me that he has repeatedly had nothing more, *for three days' subsistence, than a pint of parched corn.* He was then six years of age.

Mr. C. says the first mill in Hamilton county was constructed by his father, Mr. N. Coleman, at Columbia, who made fast two flat-boats, side by side, the water-wheel being put up between both. The grindstones, with the grain and flour, were in one boat, and the machinery in the other. Up to this time, the grinding through the whole country was by hand-mills. Under these circumstances, the settlers were obliged to get grinding done by going as far as the old settlements in Kentucky for that purpose. Noah Badgley, and three others of the first settlers of Cincinnati, started for Paris, Ky., for a supply of bread corn at this period, no crop of their own having been raised by the settlers till the next year. They embarked, with their supplies, in a canoe, up the Licking, while the river was high and the weather cold. After proceeding down that stream several miles, they came to a place where it broke into various channels, very crooked and difficult, and the canoe was forced into drift-wood and trees with such violence as to upset it. The men saved themselves by climbing a tree. One of them swam out and escaped; but Badgley, in the attempt to follow him, was carried down so rapidly by the current, that he was unable to gain the shore, and perished. The other two continued on the tree three days and nights, before they could be relieved from their perilous and distressing predicament.

The first improvements made in *Columbia* were the means of supplying *Cincinnati* and the garrison, at *Fort Washington*, with sustenance for some time, perhaps for two seasons, 1789 and 1790, before crops were raised within the city limits.

TURKEY BOTTOM, one and a half miles above the mouth of the Little Miami, was a clearing of six hundred and forty acres, made ready to the hands of the whites when they commenced the settlement of the country. The Indians had cultivated it for a length of years up to the period of Major Stites' settlement, although part of this extensive field had been suffered to grow up, by neglect, in black and honey locust, which became literally, as well as figuratively, "thorns in the sides" to the early settlers. This ground was leased, by Col. Benjamin Stites, to six of the settlers for five years, and with a clearing of Elijah Stites, and other settlers, of six acres more, furnished the entire supply of corn for that settlement

and Cincinnati for that season. Nothing could surpass the fertility of the soil, which was mellow as an ash-heap. Benjamin Randolph planted an acre, which he had no time to hoe, being obliged to leave the settlement for New Jersey. When he returned, he found one hundred bushels of corn ready for husking.

Seed corn, and even corn for hominy, and in the form of meal, were brought out of the Kentucky settlements, down the Licking, and occasionally from a distance as great as Lexington.

While those who were best off were thus straitened, it may readily be supposed that others must have suffered still greater privations. The women and their children came from *Columbia* to Turkey Bottom to scratch up the bulbous roots of the bear-grass. These they boiled, washed, dried on smooth boards, and finally pounded into a species of flour, which served as a tolerable substitute for making various baking preparations. Few families had milk, and still fewer bacon, for a season or two.

In 1789, General Harmar sent Captains Strong and Kearsy to *Columbia* to procure corn for their soldiers. They applied to Jas. Flinn, understanding he had five hundred bushels for sale. Flinn refused to sell to the army, having the previous year, when he resided at Belleville, below Marietta, not been able to get his pay for a supply he had furnished the troops at Fort Harmar, in consequence of the removal to some other station of the officer who made the purchase. Strong remarked, "If we can't get corn, we shall have to retreat on starvation." While they were talking, and with great earnestness, Luke Foster, since Judge of the Hamilton Court of Common Pleas, came up and inquired the difficulty. Captain Strong replied, "The difficulty is, that the troops have been, for nine days, on half rations, and the half rations are nearly out, and we are starving for corn." Foster agreed then to lend the garrison one hundred bushels, to be returned the next season. How badly off they were the next season, may be judged by the fact, that Foster had to ride down to Cincinnati *six* times to get nineteen bushels of it!

How opportune this offer was, may be judged by the fact that the corn in the hands of Flinn and Foster constituted two-thirds of the whole supply of *Columbia* and Cincinnati.

Judge Foster gave me the following history of the crop, which enabled him to supply the wants at Fort Washington. He had run out of seed corn, and the only one of the neighbors who could

supply him with the quantity he wanted—less than a peck—happened also to be out of corn meal. As Foster had a small quantity of this last, an exchange was promptly made of thirteen pint cupfuls, pint for pint. The corn was planted, three grains in a hill, this supply serving to seed two and a half acres. The crop had not been put in early, and it was a dry season, but such was the character of the soil, and the condition it was in, that barely turning up the earth to the hills served to keep it in moisture.

An incident or two in the pioneer history of John S. Wallace, one of the earliest settlers of Cincinnati, and a resident here until his death, which occurred not many years since, are worthy of being rescued from the oblivion to which the greater share of the events of those days is rapidly hastening.

Mr. Wallace was, with most of the first settlers of Cincinnati, a native of Pennsylvania, and had been engaged in trading voyages on the Ohio, at a date even prior to the first settlement of our city.

On his second visit to Cincinnati, in 1789, he was informed that Captain Strong's company of regulars, who had been stationed at Ft. Washington to protect the infant settlements in Judge Symmes' purchase, were about to abandon the post for want of provisions, supplies from stations higher up the Ohio having given out. Wallace called on the Captain, and suggested to him that he could probably buy as much corn at Columbia as would furnish breadstuffs for some time, while he—Wallace—would take the woods, with a hunter or two in company, and supply the meat rations. The suggestion was well-timed as well as judicious, and readily adopted.

The success of the application to James Flinn and Luke Foster, has been already narrated.

In the meantime Wallace started to the woods, accompanied by two of the early settlers, *Drennan* and *Dement*. Drennan did not understand much of hunting, and Dement had never attempted it; but they were both serviceable in the only department in which they were needed by Wallace, that is in packing the meat—Indian fashion, on their backs—Dement especially. They went down the river in a canoe, some ten miles below Cincinnati, on the Kentucky side, where they secreted their craft in the mouth of a small branch, fearing the Indians might be induced to lie in ambush for their return, if it fell under their notice. Here they struck into the woods and secured an abundant supply of buffalo, deer, and bear

meat to last the troops, about seventy in number, for six weeks—until provisions should arrive from Pittsburg.

This supply was of great importance. Without provisions the military station here must have been relinquished, to the prejudice of its speedy re-occupation, and to the necessary discouragement of persons settling at the place, as well as tempting the abandonment of the existing settlements of Cincinnati and Columbia.

From the statement of the individual I have referred to on page 122, the following notes have been compiled. "I will add to what I have already stated to you, some recollections of the journeys which our early settlers were compelled to take through the wilderness, when business or necessity called us to our former homes and neighbors."

The savages were so hostile that such journeys were not often undertaken. When they were, the traveler would start to Limestone by river, in a canoe or pirogue, from Fort Washington or Fort Miami, as the case might be. Flatboats were always used to descend the Ohio, but were of course not adapted to ascend it. The traveler always took provision with him, and kept on what was termed the Virginia side, so called from the Virginia land claims. From Limestone his route lay to Lexington sixty-four miles, all a wilderness, except a station at the Blue Licks, erected by a gentleman named *Lyons*, who carried on making salt. He had a family of colored people, and entertained travelers. As this was the only supply of salt to the emigrants at that period, and Mr. L. dealt with great fairness with the settlers, he was very popular, and had a great run of custom for that day. From Lexington the traveler proceeded to the Crab Orchard, leaving written notices at Lexington that a party would leave the Crab Orchard at such a date. These notices or advertisements were posted at stations, or on trees. This was the means of making a party from the various stations or settlements of such as were desirous also to journey east. At the appointed time, the party would assemble to proceed on horseback, with their rifles, to the old settlements from which they came. But though traveling in this mode in numbers, and with their arms in their hands, they were often attacked by Indians, and several, at different times, lost their lives.

Everything brought by the emigrants to the west was taken out on pack-horses; but as the children, both white and black, had to be taken this way also, only a few articles of the first necessity

could be added. It is easy to judge the privations and sufferings of the early settlers by this circumstance.

I traveled once, in the way of which I speak, in 1789, from Columbia, designing to accompany my husband on his way east as far as Lexington, where his father and mother resided, with whom I intended to stay until his return. He was on a journey to New York and Philadelphia. We left Maysville—then Limestone—with the agreement not to speak a word to each other, after leaving Washington, until we should reach the Blue Licks, twenty-two miles. At Washington, four miles on our journey, we learned that the Indians had attacked a party, the day before, of movers to Lexington. This we considered good encouragement to proceed, as the Indians would be off as rapidly as possible through fear of pursuit. They are a very cautious people, and will not attack except at an advantage. We remained at Lyons' all night; and, after reaching Lexington next day, my husband set out for the Crab Orchard, on his way over the mountains. In due time I received a letter from him, which was taken through the wilderness by a party of settlers coming out on their way to the west. The party was attacked by Indians, and the man who had the letter killed, and the letter, which had been on his person, was very much stained with his blood. Others of the same party were killed at the same time.

Occasionally travelers would go up the Ohio, to Wheeling, by pirogue or canoe, polling or paddling all the way; but most persons went the route which I have described. In ascending the river, they always kept the Virginia side as the safest.

When the courts were first established in Cincinnati, the officers who lived in Columbia, went down in canoes, or walked the distance, but always on the Virginia side, for fear of Indians. They were obliged to take their provisions with them, as there were very few inhabitants in Cincinnati, and no boarding-houses there at that period.

David McCash, a native of *Scotland*, emigrated to this country, with his wife and oldest son, *William*, soon after the acknowledgment of American Independence, and settled in *Mason county, Ky.*, a few miles from *Limestone*, now *Maysville*. Here *James*, a second son, was added to the family.

In 1792, he took down to *Cincinnati*, in a pirogue, apples, peaches, turnips, etc., the products of his farm, to *Gen. Wayne's*

encampment, at *Hobson's Choice*, in the region of which the present *gas works* is the centre. The General assigned him a guard to protect his property until he should effect a sale.

Next year, in April, 1793, the family emigrated to Cincinnati, and took out their effects at what was called the *Stone Landing*, above Broadway. They bought out a settler's right to a log cabin, on Walnut, north of Third street, being the lot north of that on which the Masonic building has been recently built, and purchased an out-lot of four acres for as many dollars, being the ground now including Miles Greenwood's foundry, the Bavarian brewery, and bounded south by the Miami canal, and worth now, without including the improvements, three hundred thousand dollars.

The oldest brother, William, constructed a water-cart, the frame of which was formed of two poles, in the middle of which a cross-piece was fastened; pegs to hold the barrel were driven into the lower part, and the ends served for shafts. This was the first convenience for supplying the city with water for cooking or drinking uses.

The next step in the progress of vehicles for transportation, in this city, was the construction, by McCash, of a wheeled cart. This was effected by making a pair of wooden wheels, perhaps six inches thick, and two and a half feet in diameter, connected with—not running on—an axle, which was held by large staples in which it rolled, that secured it to the bed and shafts. McCash hauled the first barrel on his car, and the first load of goods on his dray or cart, ever transported through the streets of Cincinnati.

James, the younger brother, from whom I have these facts, recollects, when but five years old, planting the four acre lot alluded to, in pumpkins, which he dropped into the hills of corn, prepared by the old man, and planted by the elder brother.

"Ah!" said Mr. McCash, in narrating these things, "we had to stir ourselves in those days. Hands were scarce, and boys were expected to do what I cannot get boys now to do for me. My father sent me, one day, to *Grummon's mill*, on Millcreek, a few rods above where *Ernst's* garden now is, with his mare. I was taking a bag of corn to be ground, and was not seven years old at the time. On this occasion I first saw *Presley Kemper*. He was at the mill, and when the corn meal was put on the beast, and such a bit of a boy riding it, he offered to go with me to the town, as Cincinnati was then called, and of as many houses as

could now be put upon a single block or square of the city. But I was too proud to accept his offer, and started alone. Where the *Brighton House* now is, my bag slid off, and I was in a pretty fix. There was no human being nearer than an old fellow named *Harkless*, who lived in *Wade's woods*, and there was no path opened to his cabin that I knew of. So I first sat down and cried, and then mounted the mare and returned to the mill, and got the miller to put the meal on the beast for me. This seems nothing now, but you must recollect that whole region was grown up in weeds to that degree that a man might be within five rods of a hundred head of cattle without suspecting they were there. And the stories of Indians, who had visited the neighborhood within two or three years, stealing cattle and carrying off children, was enough to try the spunk of a little fellow like me—yes, and of older people, too.

“Another time, after we had removed to the country, and were living fifteen miles from Cincinnati, when I was about nine years old, my father sent me to hunt up a stray mare, which was supposed to be down the Millcreek bottoms. I hunted and hunted, and at last found her at Hobson's Choice. She was too lame to travel, so I staid at Cincinnati a week, until she got better, though not well, and started home with a man named *John Hole*. When I got where I had to cross Millcreek, there was ice over it so thick that it required the mare to rise up and strike the ice with both her fore feet to break a passage, and I had hard work to keep my seat. The water was full belly deep to a horse. Hole was too cowardly to go first, and made me do so. If I had slipped off, it would have been a gone case with me.”

Such was the training which has reared up the grown men among the farmers of *Hamilton county* of the present day.

The year 1792, as has been elsewhere alluded to in this volume, was remarkable for a flood of uncommon height and of course breadth. John Ludlow, formerly Sheriff of Hamilton county, was brother to Israel Ludlow, one of the early proprietors of Cincinnati, and followed him to the west, from New Jersey, in the spring of 1792. He left *Redstone*, now *Brownsville, Pa.*, with his family, in company with a trader, named McGowan, on a flatboat loaded, among other things, with castings, bar iron, and grindstones. Ludlow had two wagons slung on one side of the boat to assist in bal-

ancing the weight of four horses, a yoke of oxen, and two milch cows, which he was taking down for farming purposes. Two individuals of Ludlow's family, were his son, *William D.*, and his daughter, *Eliza*, of the ages of five and three years respectively. They still survive—the daughter being now *Mrs. Patton*, a married lady of *Dayton, O.*, and the son a resident of *Carthage*, in this county.

The boat reached the lower island of what are now termed the *Three Sisters*, at the termination of which the boat sprung a leak by starting a plank. It had struck against a sunken log, and commenced filling with rapidity. In pulling round to make the island, the bow of the boat struck a drift-heap, on which the party sprang, at least such of them as were conscious of their danger, leaving William and Elizabeth on the roof of the boat, whither they had clambered as the water began to rise in the boat. One of the hands, with great promptitude, made the cable of the boat fast to a tree on the island.

The river being high, the current strong, and the boat unmanageable, she struck with so much force, while swinging round, as to throw the weight entirely to one side, and the horses and cattle being lifted by the water from the floor in these struggles, disengaged the roof from the boat, and it floated off with the children on it. The result of this was, that the boat was thrown on its beam ends, and all the live stock on her, one horse excepted, drowned. By an uncommon want of foresight, they had not provided themselves, as usual, with either skiff or canoe, and the distress, amounting to agony, of the parents, may be readily conceived. McGowan ran up the island to discover if any boat was in sight. He saw one nearly three miles off, and hoisted a signal of distress. This was a flatboat, on which were *Jesse Hunt* and *Joseph Prince*, two well-known citizens of this place. Prince recognized the signal, and was disposed to land their boat; but Hunt, who was aware that it was an Indian practice to decoy the whites ashore by such artifices as these, utterly objected to do so. Prince then took the skiff, and, with two of the hands, the whole party armed with rifles, rowed near enough to hold a conversation with McGowan, who explained the difficulty. There was no need of urging the party to push on and overtake the children, if possible. They stretched to their oars, but did not reach the floating roof until they had rowed

twelve miles. After the children had been taken off, the roof floated perhaps eighty rods, when it struck a drift-heap, and was carried under by the suction of the current. So narrow was the these children's escape! One of the men had been sent up by land, on the Kentucky side, to relieve the apprehensions of the family, which had been taken on board of Mr. Hunt's boat. The goods were recovered at a later date.

A feather bed had floated off under the roof, which, according to the ark fashion of that day, was pitched like the roof of a house, but neither roof nor bed were ever seen afterward.

Mobs and Riots.—Although no police officers existed in Cincinnati during the past century, and many lawless spirits existed in the community, the force of public sentiment, always strongest when the population is not so large that individuals can hide themselves in a crowd, sufficed, in the early years of Cincinnati, promptly to suppress those popular outbreaks which, in later years, have for the moment defied the public authorities.

The first disturbance of this sort occurred on the 12th of February, 1792. Lieut. Thomas Pasteur, belonging to the garrison at Fort Washington, having quarreled with John Bartle, who kept a store where the Spencer Hotel, at the corner of Broadway and Front, now stands, decoyed him, on a pretence of business, to the garrison, and, falling on him there in the presence of his myrmidons, beat him very severely. Bartle prosecuted him for the outrage, and his attorney, Mr. Blanchard, exhibited the Lieutenant, on the trial, in a light so contemptible as to draw on himself the indignation of the latter and a visit of a sergeant and thirty private soldiers, to inflict personal chastisement on the lawyer and all who might be disposed to defend him or his cause. An affray took place on Main street, in and about McMillan's office, where Mills & Kline's store stands, between the military and some of the citizens, eighteen in number, in which McMillan, who was a magistrate, with Colonel John Riddle, were particularly active, and drove the soldiers off.

The interference of the military, naturally created great excitement, and General Wilkinson, then in command at Ft. Washington, reduced the Sergeant to the ranks, and would have inflicted further punishment, had it not clearly appeared that the party acted under orders. He also issued the following general order.

HEADQUARTERS, FORT WASHINGTON, }
February 13, 1792. }

The riot in the town of Cincinnati yesterday, and the outrage committed, by a party of soldiers, on the person of a magistrate of this territory, is a dishonor to the military, and an indignity to the National Government, which demands that the most exemplary punishment should be inflicted on the perpetrators, although the Commandant cannot admit the idea that any gentleman in commission, who wears the garb of honor, could be instrumental or accessory to this flagitious transaction; yet the circumstance of a Sergeant, and twenty or thirty men from the same company, leaving the garrison in a body, as has been represented to the Commandant, carries with it an aspect of premeditation, and may subject the officer commanding such company to undue suspicions and censures. To avert such consequences in future, and to restrain the licentious habits of the soldiery, the Commandant calls for the firm co-operation and support of his officers, and orders that all duties beyond the walls of the garrison, whether for water, wood, or provisions, must be done by detachment, under a non-commissioned officer, who shall be answerable for the conduct of such detachment. No private is to pass the gateway on any other pretence, without a special commission from the commanding officer. The Commandant laments that he should be reduced to the necessity of exerting so rigid a system of police, but he considers it indispensably necessary, not only to the good of the service, but the honor of the corps.

By order.

JOHN WADE,
Ensign, Fort Adj't.

Lieut. Pasteur was tried at the General Quarter Sessions, the succeeding year, and was sentenced to a fine of three dollars for the assault.

There was only one more disturbance here of the public peace during the past century.

In the spring of 1794, and while General Anthony Wayne was marching north to meet and chastise the hostile Indians, and erecting military forts in his line of advance to protect the country in his rear, a detachment of volunteers from Kentucky, accompanied by some hundred, more or less, friendly Indians from the Mississippi region, encamped for a few days in the vicinity of Cincinnati,

preparatory to pushing forward to reinforce the army of the north. These Indians were encamped on *Deer creek*, on the spot now occupied by *Sam'l Berresford*. They brought with them a young woman who had been taken captive in some border incursion into western Pennsylvania. It was supposed she had relatives in Cincinnati, which did not prove to be the case. But there were two or three individuals who knew her friends near Pittsburg, being themselves of that neighborhood; and one of them succeeded in ransoming her from the Indians by the payment of a barrel of Monongahela whisky. The exchange occurred at a tavern on Broadway, just above *Bartle's* store, and the Indians, who had been drinking while the barter was pending, had a thorough frolic of it when put in possession of the whisky. Next day, a large share of the liquor having been drank, they became dissatisfied with the exchange, and were for re-taking the girl by force of arms. This was resisted, of course—peaceably, but firmly—by those into whose custody she had passed, who were Irishmen, from Pennsylvania, with several of their countrymen and other individuals resident there. The girl had been secreted, so that the Indians could not discover her retreat. At this period the east side of Broadway commenced at a point about twenty or thirty feet from *Bartle's* corner, opposite it, widening so rapidly that at the distance of half way to *Cromwell's* corner, the street was wider than even at present, its east side being occupied with the various artificer shops belonging to the garrison. The Indians came down Broadway to the number of perhaps fifty, and at the narrow part of the street were met and confronted by their opponents; but after the stones, or rocks, as they were called, lying about had been picked up and thrown, the Irish contrived to gather up *shillalals*, and although greatly inferior in numbers, drove their enemies up Broadway clear to the hill. *Isaac Anderson*, a well-known citizen of that day, who had been taken captive in *Laughery's* defeat, and always bore a grudge against the whole race of red skins, was in the thickest of this fight. *Captain Prince*, who commanded the garrison at that period, sent out a detachment of the troops to quell the disturbance, but it was all over by the time they reached the ground.

The row of log cabins on the east side, in front of which this engagement took place, received from the circumstance the name of *Battle Row*, which it retained until 1810, when these houses

were pulled down to make way for the present buildings put up by *John H. Piatt*.

The girl was afterward restored to her friends, in Pennsylvania, and is believed to be still living.

Pioneer Religious Society.—In laying out the town of Cincinnati, the proprietors dedicated in-lots Nos. 100, 115, 139, and 140, to church and school purposes. The succeeding year Rev. David Rice, of Kentucky, organized a religious society of the Presbyterian faith and order, which proceeded to occupy the premises thus set apart, but found themselves at that day too feeble, even with such aid as they could obtain in the town, to build a church edifice; the only use therefore, for some time, made of the premises, was that of a grave yard. Meetings for worship were held at a *horse mill*, on Vine st., below where Third st. has since been opened, being then the foot of the hill, and also, occasionally, at private houses. *John Smith*, of Columbia, then a Baptist preacher, better known since as one of the early Senators, from Ohio, in the United States Senate, and implicated in Aaron Burr's memorable project, occasionally preached to the society.

In 1791, a number of the inhabitants formed themselves into a company to escort the Rev. James Kemper from beyond the Kentucky river to Cincinnati. They accompanied him hither, and on his arrival, a subscription was set on foot to build a meeting-house. Before this time, the trees upon a portion of the lot, at the corner of Fourth and Main sts., had been partially cleared, and within a small circle, seated upon the logs, the people met for worship, in the open air, with their rifles by their sides. In 1792, the meeting-house was erected, and the whole four lots were inclosed with a post and rail fence. The timber for the building was taken from the spot upon which it was erected. The subscription-paper for the erection of the church is still in existence. It is dated January 16, 1792. It is headed as follows:

We, the subscribers, for the purpose of erecting a house of public worship, in the village of Cincinnati, to the use of the Presbyterian denomination, do severally bind ourselves and executors firmly and by these presents the several sums of money and commutations in labor, respectively annexed to our names, to be paid to Jno. Ludlow, Jacob Reeder, Jas. Lyon, Moses Miller, Jno. Thorpe, and Wm. McMillan, or either of them, their heirs or administrators, trustees appointed for the business of superintending the

building aforesaid, payments to be made as follows: One third part of our several subscriptions, to be paid so soon as the timbers requisite for the aforesaid building may be collected on the ground where the said house is to be built; another third, when the said house is framed and raised; and the other third part, when the aforesaid house may be under cover and weather-boarded.

In witness whereof, we have hereunto subscribed our names, on the day affixed to our names.

Here follow the names of the subscribers, which are given that we may cherish the memory of the generous dead, and furnish an example to the living.

John Ludlow,	Jacob Reeder,	James Lyon,
Moses Miller,	John Thorpe,	Wm. McMillan,
John B. Smith,	David E. Wade,	James Brady,
Joel Williams,	Levi Woodward,	Wm. Woodward,
Jeremiah Ludlow,	James Dement,	Richard Benham,
John Cutter,	Joseph Lloyd,	Nehemiah Hunt,
Cornelius Miller,	Abram Bosten,	Gabriel Cox,
Samuel Pierson,	Daniel Bates,	Benj. Fitzgerald,
James Kemper,	Isaac Bates,	John Adams,
Wm. Miner,	James Miller,	Seth Cutter,
S. Miller,	John Lyon,	James McKane,
William Harrison,	Margaret Rusk,	Benjamin Valentine,
Asa Peck,	Robert Hind,	Robert Benham,
Samuel Dick,	Joseph Shaw,	Samuel Kitchell,
Matthias Brant,	Samuel Williams,	Jabesh Wilson,
David Logan,	James Lowry,	David Long,
Alex. McCoy,	Joseph Spencer,	David Hole,
James Blackburn,	James Cunningham,	Isaac Felty,
James Wallace,	Robert Caldwell,	Jona Davies,
Thomas Ellis,	Dan'l Shoemaker,	John Blanchard,
Benjamin Jennings,	John Gaston,	Jonas Seaman,
Reuben Roe,	John Cummins,	Elliott & Williams,
Thomas McGrath,	James Bury,	Thomas Gibson,
Henry Taylor,	Elias Waldron,	Thomas Cochran,
James Richards,	John Bartle,	J. Mercer,
H. Wilson,	William Miller,	James Reynolds,
Thomas Brown,	Matthew Deary,	James McKnight,
John Darrah,	Samuel Martin,	Daniel C. Cooper,
Moses Jones,	Francis Kennedy,	Israel Ludlow,

J. Gilbreath,	James Wilkinson,	Winthrop Sargent,
Richard Allison,	Mahlon Ford,	John Wade,
M. McDonough,	J. Mentzies,	Joshua Shaylor,
William Peters,	James Kremer,	W. M. Mills,
H. Marks,	Matthew Winton,	Ezekiel Sayre,
Samuel Gilman,	W. Elwes,	John Dixon,
		Daniel Hole.

In 1792, as stated, the first church edifice was built. This was a plain frame, about thirty by forty, roofed and weather-boarded with clapboards, but neither lathed, plastered, nor ceiled. The floor was of boat-plank, laid loosely upon sleepers. The seats were formed by rolling in the necessary number of logs, which were placed at suitable distances, and covered with boards, whip-sawed for the purpose, at proper spaces for seats. There was a breast-work of unplanned cherry boards, which served for a pulpit, behind which the clergyman stood on a plank supported by blocks. The congregation were required to attend with rifles, under penalty of a fine of seventy-five cents, which was actually inflicted on *John S. Wallace*, formerly auditor of this county, who had left his rifle at home through forgetfulness. Others, also, doubtless incurred fines on this account.

As a specimen of the manner in which the clergymen of that day were sustained, I annex an original receipt which I have before me:

RECEIVED, February the 14th, 1794, of McMillan, Esq., the sum of three dollars, it being for Mr. Kemper's salary for the year '94, as an unsubscriber.

Received by me,

CORNELIUS VAN NUYS.

On the 11th of June, 1794, another subscription was circulated for the purpose of further finishing the Presbyterian meeting-house in Cincinnati, and also for paling the door-yard and fencing in the burying-ground, to be paid to the same persons named as trustees.

To this paper, in addition to those who had already subscribed to build the meeting-house, and who again contributed to its completion, we find the names of—

Ezra F. Freeman,	David Zeigler,	C. Avery,
Oliver Ormsby,	Job Gard,	Robert Mitchell,
Martin Baum,	G. Yeatman,	John Brown,
Joseph Prince,	Andrew Park,	John Riddle,
Patrick Dickey,	A. Hunt & Co.	Peter Kemper.

When the property was dedicated by the proprietors, they held the equitable title only; the government held the legal estate, but had contracted with John Cleves Symmes to convey to him a large tract of land, which included the plat of Cincinnati. The proprietors claimed under Symmes. In 1794, the President of the United States issued a patent to Symmes, who was thus invested with the legal estate; and afterward, on the 28th of December, 1797, conveyed the lots to Moses Miller, John Thorpe, John Ludlow, James Lyon, Wm. McMillan, David E. Wade, and Jacob Reeder, trustees for the Presbyterian congregation of Cincinnati.

The church-building was removed, in 1804, to Vine, below Fifth st., and became what was known, for many years here, as Burke's church. It was substituted by a large brick building, which stood until a few years since, and is now replaced by the splendid edifice occupied at this time by the First Presbyterian society.

Original Timber, Levels, and Surface of the City, etc.—Few persons appear familiar with the process by which a settlement enlarges to a town first, and subsequently to an important city. Those who have not grown up with it, cannot realize the gradual and various changes it assumes, and how few of its original features are preserved in that progress. No one who casts his eye over the extensive platform of Philadelphia, for example, and surveys the superb site, swelling regularly but gradually from the Delaware to Fifth st., and exhibiting a uniform surface, would suppose, unless he had previously known the fact, that the city, in its earlier condition, abounded with ponds and gullies, and was intersected with rivulets and creeks to an extent which gave no promise that it would ever reach its present unrivaled regularity and beauty of surface. Such, also, was the original configuration of Cincinnati. From the hill which skirts the present line of Third street, to the river bluffs, lay a broad swamp, which occupied, principally, the space from Second to Lower Market sts., although, from its irregular shape, parts of it extended even further south. This was originally a thicket of beech and sugar-trees, and grape-vines, interspersed with a heavy undergrowth of spicewood and papaws. On the second table, now lying between Third street and the hills in the rear of Cincinnati, the ground was more unbroken in its surface, and heavily timbered with beech, sugar-tree, and poplar, some of them of immense size. The river bank was a high bluff, extending, opposite the present public landing, about one hundred and

fifty feet south of the upper line of Front st., and falling off north to the swamp rather rapidly. At Sycamore st. a large cove put in, reaching within a foot of what is now the northeast corner of Sycamore and Front streets. Here Griffin Yeatman kept one of our earliest public houses. It is difficult now to realize the fact, that the north line of the river at this point nearly reached that of Front street. At the corner of Ludlow was another of these coves, and another still higher up, just below the mouth of Deer creek. The first of these was called the Stone landing, and the second Dorsey's cove. The ground fell off all the way from the banks of the Ohio to Second, then called Columbia street. The coves referred to, in early days, were the usual landing places for emigrants, as they probably had been to the various expeditions which the settlers, in Kentucky, from time to time, sent over to retaliate on the Shawanese Indian settlements to our north, their incursions across the Ohio. The old Indian war-path from the British garrison, at Detroit, crossed the river at this point, which was also the regular avenue by which the savages on the northern side of the Ohio approached the Kentucky stations.

The late Judge Matson, of North Bend, in a letter I received from him, in 1845, says:

In reply to your inquiry, what kind of timber first covered the site of Cincinnati, I can state my recollections, which are very distinct on the subject. The bank of the river had a heavy growth of beech trees, many of them very large. At *Hobson's Choice*, on the river, west of Western row, the encampment of Gen. Wayne, they were cut down, and the stumps dug out, over so much of the bank as to make a parade-ground; some of the largest being left standing adjacent for purposes of shade. Where the swamp came in between the river bank and foot of the hill, was a growth of white walnut, soft maple, white elm, shellbark hickory, and white ash. On the second table of Cincinnati was spread a variety of timber, such as beech, ash, black walnut, hickory, black and red oak, generally of vigorous growth. Here and there white oak and poplar interspersed the rest. A space of perhaps one hundred and fifty acres north and west of Barr's dwelling, down to Stonemetz's ford, on Millcreek, was filled with poplar and beech. Of the latter there is, as you know, a small grove still standing, and called Loring's woods. This is the only relic of the original growth of Cincinnati, except scattered trees. An abundant range of spice

wood was the undergrowth. They grew so thick that out at North Bend, after cutting off the bush, and digging the roots loose, I have not been able, unassisted, to lift the clump out of the ground. For three or four years prior to the year 1794, there had been a large scope of *out-lots*, as they were called, in a worm-fence inclosure, extending from about Sixth street north to Court street, and from Main street west to the section-line, which nearly follows the line of what is now John street. There was hardly a building on that space. I recollect but one, a small frame building on Main street, on the St. Clair square, between Seventh and Eighth. This had been put up by Thomas Gowdy, a lawyer of that period, as an office, but was not occupied as such, being found too much out of town for business purposes. In May of that year, one of the occupants of the inclosure, being engaged in burning brush at the west end of it, the fire accidentally spread over the whole clearing, fastening on the deadened timber which had been girdled, and was, by this time, as dry as timber could become. The wind was from the west, and was very high, which was what first caused the conflagration, and the sap-wood, as it burned, peeled off in very large flakes, spreading the fire farther and farther east until it reached to Main street front. It may easily be imagined what a magnificent sight was presented by more than one hundred acres of dry timber in flames. The whole population was engaged, as far as practicable, in saving the rails, of which, in fact, but few escaped. On Gowdy's office three or four men were stationed, while buckets of water were handed up to them from time to time.

As this was the first fire in Cincinnati, so it was the most extensive as respects the space it covered. It compelled the settlers to clear the out-lots, much sooner than they would have done, to get rid of the partially-burnt timber left standing unsafely, or lying on the ground in the way of putting in the corn crop, for which they were preparing at the time.

In the infancy of the city, there was but little communication maintained between the hill and bottom, so far as keeping roads for wheeled vehicles, and hardly more for horses. Even at a later date, wagons could stall going up Walnut street, opposite the N. W. corner of Front street. On Main, from Front to Lower Market streets, then many feet below its present grade, from Hill's store, No. 31, to Lower Market street, boat gunwales were laid as footways, part of the distance, and the citizens walked, in very muddy

weather, upon the rails of the post and rail fences, which inclosed the lots of that street. When Pearl st. was opened, some twenty-eight years ago, and the building extending from the corner to Neave & Son's store, was putting up, in digging the foundations, a number of pannels of posts and rail fence, the relics of those days, and which had been covered up for, probably, thirty years, were found and dug up absolutely sound. Causeways of logs, generally a foot in diameter, were laid in various parts of Main st., and it was but a few years since, in re-grading Main from Eighth to Ninth street, that a causeway of such logs were taken up, sound, but water-saturated, which extended from near Eighth street to a spot above Pfau's tavern, probably one hundred and twenty feet in distance.

As late as the year 1800, Broadway, opposite Columbia street, and for one hundred feet north of that point, was the centre of a pond, three or four acres in extent, to which the early settlers resorted to shoot plover. Another pond, of considerable size, spread on every side from the northeast corner of Fifth and Main streets, over which persons, still living, have crossed on decayed logs. A bluff gravel bank occupied the line of Third street, for two or three squares east and west of Main street. This overhung the lower ground to the south, and was frequently caving in upon it. A faint idea only of the elevation of the bluff can be formed by observing the ascent of Main street, from Lower Market to Third. The hill, at an early date, presented its front below the line of Hopple's alley, nearly thirty feet above the present level, while Lower Market must have been thirteen or fourteen feet below its present grade. A swamp extended through Lower Market street its entire distance west of Ludlow street.

One of the first brick houses put up in this city, was the well-known *Hopple* tobacco establishment on Lower Market street, and occupied in that line until within a few years, and now displaced by the fine large house of Siebern & Co. This building, though of brick, and three stories high also, one of those stories being covered over in the repeated fillings up of Lower Market street, *was built upon boat gunnels*. It was put up under the superintendence of Casper Hopple, still living, and a fine specimen of the early pioneers; and a little incident in its history may be worth recording in illustration of the point I start with—the changes of grades and surfaces which city improvements have wrought. Fourteen

feet above what then constituted the sill of his door, he placed the joists of the next story, and while that tier was laying, our old fellow-citizen, *Jonathan Pancoast*, passed by, and, after gazing at the improvement, without comprehending its design, asked of Mr. Hopple what he meant by what he was doing? Mr. H. observed, that, as accurately as he could judge, that would be the proper range of the floor, when Lower Market street would be filled to its proper level, to correspond with what he supposed would prove the final grade of Main street opposite. When the first filling of Lower Market street took place, Mr. H. was compelled to convert some five feet deep of the lower story into a cellar, to which he had access by a trap-door; and after the establishment at the present grade, of that street, the level at which he had built his joists, corresponded exactly to its purpose, giving him a sill at his door and a cellar of the ordinary depth with one, as already described, below it.

Nearly opposite, on the west side of Main street, on the site of J. Simpkinson & Co.'s store, Captain Hugh Moore, another of our pioneers, had a building occupied by him as a store for the sale of such goods as were required by the wants of the early settlers. This was an erection of boat-planks for the inside walls, lined with poplar boards, with boat gunnels also for foundation. The building was perhaps thirty-six feet deep, and twenty in front. A clap-board roof sheltered its inmates from the weather. This was the only building Mr. Moore was able to secure for his purpose, houses and stores being as difficult to obtain in those days as at present. When he had bargained for the house, which he rented at one hundred dollars per annum, and which, with the lot, one hundred feet on Main, by two hundred on Pearl street, he was offered, in fee simple, at three hundred and fifty dollars, he brought the flat-boat which was loaded with storegoods from the Ohio, via Hobson's Choice, not far from Mill street, up Second or Columbia streets, and fastened the boat to a stake near the door, as nearly as can be judged, the exact spot where the *lamp-post now stands*, at the southwest corner of Main and Pearl streets.

Mounds, etc.—The principal of these were of a circular form, one of them extending from Sycamore to Ludlow, and from Fifth to midway between Third and Fourth streets. The other reached from the west side of Race, eastwardly, beyond the centre of the block between Walnut and Vine streets, and from midway between

Third and Fifth streets. These circles were about in diameter six hundred feet each. West of these, and removed only within ten or twelve years, was the highest of all, although inferior in surface to the two referred to, being originally between thirty and forty feet high. General Wayne, in 1793, had eight feet cut from the summit, and put up a sentry-box with sentinel to command a look out over the whole platform of Cincinnati. The last was on the upper side of Fifth street, at a point where a street was afterward cut through, and, in reference to this local feature, has been named Mound street.

Other mounds, of various sizes but of less consequence—one at the corner of Main and Third streets; a large elliptical one, stretching obliquely from Vine nearly to Elm street, immediately north of the present canal; one on the upper side of Seventh, below Smith street; one on the eastern side of Western row, between Ninth and Court streets; one west of Plum, near the old corporation line; one on Fourth street, occupying the site of Pike's Opera House; and one on the lower side of Fifth, west of Walnut street—were scattered over the whole city plat.

I refer my readers for an interesting as well as accurate and minute description of these works and the vestiges of antiquity found upon leveling them to the general surface, in the progress of our city improvements, to Dr. Drake's Picture of Cincinnati, and Judge Burnet's letters in the Transactions of the Historical and Philosophical Society of Ohio.

Pioneer Recollections, taken in 1845.—Samuel Stitt, who died in 1847, at the advanced age of seventy-eight years, was born in the county of Down, Ireland, in 1769. At the age of twenty he left his native country, and went to America, landing at New York, where he remained until 1796, and in May of that year reached Cincinnati, which became his final resting-place. He settled on the river bank, upon the spot now occupied with the warehouses of Thirkield & Co. and Shoenberger & Co. He bought of John Riddle, in 1800, the lot I refer to, sixty feet by two hundred, with a double frame, for *twelve hundred dollars*. After holding it for thirty-three years he leased it, in 1833, on perpetual lease, at *twelve hundred dollars* per annum. The property had been bought by Colonel Riddle, of Scott Traverse, for *sixty-seven dollars and sixty-seven cents*, at the close of 1790. The following disjointed notes I took down from Mr. Stitt's lips, several years since.

Facing the river, at the time I came, was entirely a bluff bank, the surface being cleared, excepting a large elm tree, east of what is now *Commercial Row*, from which, for several years, the martins took their departure. It stood many years, until struck by lightning, when it was cut down to keep it from setting on fire the adjacent houses. There was a large cove opposite Griffin Yeatman's, at the mouth of Sycamore street. This cove, and at Joel Williams', now Latham's corner, were the principal landings. There was another cove at Ludlow street. An old woman, named Wright, who did washing for the garrison, had a cabin at this cove, and was obliged to remove to the upper bank when the river was high. There was a duck and snipe pond, a hundred feet across, where Walker kept store, reaching half-way to Sycamore street. A post and rail fence extended along Main from Columbia street, which, in extremely wet weather, was our only means of getting on foot to the hill. There was no horse-path at this period up the hill, on Main st., which was a bluff, gravel bank; and it required a pretty active man to climb it; but there was a cow-path up Broadway, and a very steep wagon road up Sycamore street. The timber was all cut down on the town plat in 1796, when I first saw it.

Gibson had a frame house at the corner of Main and Front sts., in which he kept store. D. C. Cooper, who afterward laid out Dayton, had the opposite corner, now Bates', which he rented of Israel Ludlow. There were no other houses between Front and Columbia sts., except a few one-story frames; at Mitchell's corner there was an uninhabited log house.

Geo. Gordon kept tavern above Resor's, and there was no other house on that side toward Second street; all up to the corner was a pasture-lot, belonging to and occupied by Israel Ludlow.

William Ramsay kept store where Kilgour & Taylor have since, at the corner of the alley below Main street. Isaac Anderson and Samuel Dick owned and occupied the lots, west of Front, as far as Walnut street. William McCann kept tavern at Liverpool's corner. Freeman, the printer, resided between Walnut and Vine sts.

Martin Baum, William Ramsay, and myself, clubbed together and paid *one dollar*, per year, to a man for mowing down the gympson weeds in front of the houses on the public landing. We all had our pasture-lots; mine was on Deercreek, a little north of Fox's sawmill. On this lot was a large hollow sycamore tree, which was occupied as a dwelling by a woman who washed for the garrison.

A large limb had been broken off, and the stump of it left, served for a chimney. It was as much blacked by the smoke as any brick chimney I have seen since.

General Wilkinson commanded the garrison in 1796. He had a carriage, with two handsome horses. It was the only carriage in the place at that period.

J. W. Browne kept store where Manser's iron store now is—William and Michael Jones across the alley. Duffy had a store next east, and Baum where Shoenberger's iron store has been since built. Major Ziegler kept store next to the corner of Sycamore, where Yeatman had his tavern.

The first jail was on Water street, west of Main. It could be readily seen from the river. The debtors and criminals were all shut up together; but in daylight the jailor allowed them the liberty of the neighborhood, they taking care, whenever the sheriff was about, to make tracks to the jail as rats to their holes. There was a whipping-post, when I came to Cincinnati, about one hundred feet west of Main, and fifty feet south of Fifth street, near the line of Church alley. Levi McClean, the jailor, did the whipping. I saw a woman whipped for stealing. McClean would get drunk, at times, and in these frolics would amuse himself by whipping, with a cow-hide, the prisoners in jail, all round, debtors as well as criminals.

The second jail was built at Stagg's, corner of Walnut and Sixth streets. It was burnt down, after standing some years. The third was built on Church alley, nigher Walnut than Main street. The court was held on the Gano property, Main, between Fifth and Sixth streets. The Supreme Court, of which Symmes was a judge, was held at Yeatman's tavern.

When I first saw the mound on Fifth street, it had timber on it, like Loring's woods. There were poplars growing of immense size in the hollows below Hathaway's.

I never saw Indians but once, in early days, and this was a party which came down Main street, in single file—all in a row, like wild geese. The squaws came last. They were quartered in the artificer's yard, just where Strader & Gorman's warehouse now stands.

Hezekiah Flint, one of the forty-nine who formed the first settlement of Ohio at Marietta, in 1788, and who afterward resided here for the rest of his life, made the following statements for my use.

Emigrants came down in every sort of craft. I came down in a flat, loaded with corn, and landed in Cincinnati, April 7, 1794, precisely six years from my first landing at Marietta, April 7, 1788, having been one of the original forty-nine who made the first settlement in Ohio. The oldest building now in the city is Liverpool's old log cabin, corner of Walnut and Front streets. It was one of the original cabins. There was a pond at the corner of Main and Fifth sts., which extended into the northeast corner—Burdal's—of that block a considerable distance. This was overgrown with alderbushes, and occupied by frogs. Main street, above Fifth, had to be causewayed with logs to pass it.

I bought a lot of James Lyon, in 1794, one hundred by two hundred feet, on Walnut, below Fourth, for one hundred and fifty dollars, and the southeast corner of Fourth and Walnut, the same size, three years afterward, for a stud horse, valued at four hundred dollars. I cultivated the square, opposite the Cincinnati College, from 1795 to 1800, as a cornfield. I was offered the corner lot of Main and Fourth, one hundred feet on Main by two hundred on Fourth street—the Harrison drug store corner—in 1796, for two hundred and fifty dollars. The same year Francis Menessier, of Gallipolis, bought the lot, one hundred feet on Main, and two hundred on Third street—where the Trust Company bank stands—for an old saddle, not as good as can now be bought for ten dollars. Gov. St. Clair bought sixty acres at fifty dollars per acre. This included that part of the city from the canal to Mrs. Mercer's line, and from Main to Plumb streets. The wagons used frequently to mire in getting to the hill. I have helped to get them out at Liverpool's corner, and on Main street, opposite Jonathan Pancoast's, where we had to pry them out with rails.

Corn sold at thirty-seven and a half cents per bushel, pork at fifty to seventy-five cents per one hundred pounds. When it rose to one dollar, everybody said it could not keep that price. Wheat-flour, seventy-five cents to one dollar per one hundred pounds. Wild turkeys, twelve and a half to twenty-five cents each, according to quality. I have known wild turkeys shot that were so fat that they would burst in falling. Rifle powder sold at a dollar to a dollar and fifty cents per pound. Salt, six to seven dollars per bushel. I bought, at those prices, rock salt from McCullagh, who kept store on Main st., where Lawson's coppersmith establishment now is. I was offered Conn's lot, at the corner of Main and

Lower Market streets, one hundred by two hundred feet, for two hundred and fifty dollars, payable in carpenter work. St. Clair's house, on Main street, is the oldest permanent dwelling, and Hopple's, on Lower Market street, the oldest building for business purposes in Cincinnati.

Mrs. Rebecca Reeder, now residing at Pleasant Ridge, in this county, in a letter to the Pioneer Association of this city, gives these particulars of pioneer incident: My father, mother, and seven children, landed at Cincinnati on the 8th of February, 1789. The first persons we saw, after landing, were Mr. McMillan and Mr. Israel Ludlow, one of the proprietors of the place. There were three little cabins here when we landed, where the surveyors and chain-carriers lived. They had no floors in these cabins. There were three other women here besides my mother. Their names were Miss Dement, Mrs. Constance Zenes, (afterward married to Mr. McMillan,) Mrs. Pesthal, a German woman, and my mother, Mrs. Rebecca Kennedy, which made four women at that time. There were but two families that had small children; they were the German family and my father's family.

Mr. Ludlow came down to our boat, and invited my father and family up to stay in their cabin until we could get one built; but my mother thought they could remain more comfortably, with their small children, in their boat. So we lived in our boat until the ice began to run, and then we were forced to contrive some other way to live. What few men there were here got together and knocked our boats up and built us a camp. We lived in our camp six weeks. Then my father built us a large cabin, which was the first one large enough for a family to live in. We took the boards of our camp and made floors in our house. Father intended to have built our house on the corner of Walnut and Water streets, but not knowing exactly where the streets were, he built our house right in the middle of Water street. The streets were laid out, but the woods were so very thick, and the streets were not opened, so it was impossible to tell where the streets would be.

At the time we landed here, the army was stationed at North Bend. The army was in a suffering condition from the want of bread. They heard that we had landed with a considerable quantity of flour and corn-meal. There were several soldiers sent up to my father to get a few barrels of flour for the benefit of the army. Father told them he did not bring flour here to sell, but to save his

children's lives here in this forest. They had their guns with them, and said they were sent to take it by force, if he would not give it up. My father took down his gun, and told them he would stand in defence of his flour. They then went back to North Bend, and Judge Symmes, who lived near the fort, then wrote my father a letter, and told him to roll the soldiers out as many barrels of flour as they required, and he would see it replaced. My father then gave them as much as they wanted, and it was replaced in due time.

My father established the first ferry, and received the first license ever granted. He ferried all the militia and cattle over the river. Thomas Kennedy kept the ferry on the other side of the river, and my father, Francis Kennedy, on this side. Between the two, they did all the business during the three campaigns of Gen. Harmar, Gen. St. Clair, and Gen. Wayne. My father was drowned at the close of the war, while ferrying cattle over the river for the army. It has been stated, in the papers, that Joel Williams had the first ferry, but he did not; he was here before my father, but he did not have the first ferry.

Shortly after my father's death, Joel Williams applied to court to get license to run the ferryboat, but the court would not grant him license until they would know whether my mother wished to keep it or not. They wrote her a note to know what she wished to do. She thought it would be too much trouble for her to attend to it, so the court granted him license.

The names of the persons that kept stores here first, were Smith & Findley, afterward General Findley. Colonel Gibson kept his store on the corner of Main and Water streets, and Major Ziegler kept another. He was a German officer, out of the army.

Joel Williams and Isaac Felter kept the first taverns. They kept on Water street. I heard it announced that Mr. Smith—if I do not mistake the name—was the first sheriff; but he was not. John Ludlow was the first sheriff, and hung the first man that was ever hung here. The name of the man that was hung was Mays. The blood of Vancleve was the first that was mingled with the soil of Cincinnati; and Elliott's was the second. They were killed by the Indians. I can remember when no one dared to go to church without his gun, where the Presbyterian Church now stands. People were liable to a fine if they went without them, for they were in so much danger from the Indians.

I will mention a few names of persons that were here at a very early period, as I have never heard their names mentioned. They were Mr. Blackburn and family; Mr. Garrison and family; Mr. McHenry and family; Dr. Morrell and family; Dr. Hoel and family; Stephen Reeder and family; Jacob Reeder and family; Dan'l Kitchel and family; Mrs. Phebe Flint, daughter of Daniel Kitchel; Samuel Dick and family; Mrs. McKnight and sons; Isaac Anderson and family. These were all very early settlers.

The first summer after we came here, which was 1789, the people suffered very much for want of bread; and as for meat, they had none at all only as they killed it in the woods. That was all they had to eat.

Mrs. H. Wallace, widow of John S. Wallace, in 1846 stated to me that, in 1791, there was but one frame dwelling in Cincinnati, which belonged to Israel Ludlow, and stood at the lower end of Main street. The room in front was occupied as a store. Matthew Winton kept tavern on Front street, nearly opposite to David E. Wade, rather to the west. Ezekiel Sayre exactly opposite Wade. John Bartle kept the first store in Cincinnati. A German, named Bicket, had a dram-shop opposite Plum street, between Front and the river bank. John S. Wallace resided on Front street, below Race. Joel Williams kept tavern at Latham's corner. There was a great flood in 1792, which flooded the entire bottom to the depth of five feet. The original timber on the town plat was beech, sugar-tree, and walnut, with poplar on some spots, and many of the trees of large growth. The improvements went gradually up Main and Sycamore sts., toward the hill, which was so steep the ascent was almost too much for a horse. Corn was raised here in 1790 and 1791. The men worked in companies, and kept a guard on the lookout. In a large field up Western row, John S. Wallace, and several others, were shot at by Indians. The party fired back, and drove off the savages, who left fifteen blankets on the field, but succeeded in carrying off the horses belonging to the party, which were in the inclosure. The Indians were still more troublesome, in 1792, although their mischief was confined to destroying cattle, and conveying off horses. They shot three arrows into a large ox with such force as to make marks on the opposite side. The arrows had stone heads. Provisions were very scarce and dear on the first settlement. I saw ten dollars given for a barrel of flour, and eight dollars for a bushel of salt. Our meat was got

principally from the woods. A great share of the hunting was done in Kentucky, where the game was more abundant, and less danger of being surprised by the Indians. My husband killed two bears and an elk as late as 1794. The game was so abundant as to form the principal support of the army at Fort Washington. Turkeys were so plentiful that their breasts were salted down, smoked, and chipped for the table, as dried beef in later days.

Value of Property, Past and Present.—Some sixty years since, an emigrant from Pennsylvania, an Irishman by birth, landed at Cincinnati, with the design of seeing some old acquaintances who had settled a few years before in and adjacent to the then village. He had brought with him one hundred dollars in specie, carefully put up in a woolen stocking, with a shot-bag for an outside covering. Our temperance societies were not then in blast, and if they had been, they would probably have failed in proselyting P— into their ranks; for he was immoderately fond of the “*Monongahale*.” He found his old associates occupying and cultivating lands, a part within our present city limits, the residue dwelling some four or five miles from town.

Both parties invited him to settle, and pressed him to buy alongside their respective farms. The *outsiders* dwelt on the folly of giving two dollars an acre for land in the village, when just as good could be bought, five miles out, at half the price. The *insiders* urged the convenience of being handy to the river for trading purposes. “If you go out to the country, every gallon of whisky you buy, will cost you a dollar or a dollar and a half.” The bottle circulated briskly, and each party pulled the new settler, that was to be, about—pretty much like an undecided voter at the polls, inclining always to the last speaker. “Well,” says he, finally, “boys, we’ll take another horn, and then I’ll make up my mind.” The horn was emptied, and the decision made in favor of the town farm.

Twenty-five acres was bought for the sum of fifty dollars, in what is now nearly the centre of Cincinnati, which, after deducting the streets laid out on the premises, have left six entire squares or blocks, of four hundred feet square. This, if destitute of any portion of the improvements now on it, would readily command, if laid out in lots of the usual depth, two hundred and fifty dollars per front foot—being three hundred and fifty thousand dollars per square; or more than two million dollars for the entire original purchase of fifty dollars.

Ellison E. Williams, to whom I have already referred, was originally the owner of that valuable property at the corner of Main and Front streets, facing one hundred feet on Front and two hundred on Main street, extending from Wilson & Hayden's store south to Front, and thence east of Main street as far as to L. F. Potter's salt agency warehouse, and became so under these circumstances: The lot in question was taken up by Henry Lindsey, who, after holding it a year or more, disposed of it, for a job of work, to a young man whose name Williams has forgotten. The second owner, having a desire to re-visit his former home in New Jersey, and being unwilling to trust himself through the wilderness without a horse, begged Williams, with whom he was acquainted, the latter then residing at the point of the junction of the Licking and the Ohio, to take his lot in payment for a horse, saddle and bridle of his, valued at sixty-five dollars. After much importunity and principally with the view of accommodating a neighbor, Williams consented; and, after holding the property a few days, disposed of it again for another horse and equipments, by which he supposed he made ten dollars, perhaps. This lot, not long afterward, fell into the hands of Colonel Gibson, who offered it for one hundred dollars to Major Bush, of Boone county, in 1793. So slight was the advance, for years, in property in Cincinnati. This lot, probably at this time the most valuable in the city, estimating the rent at six per cent. of its value, is now worth six hundred thousand dollars. Where else in the world is the property which, in seventy years, has risen from four dollars to such value?

Major Ferguson, who fell in St. Clair's defeat, in 1791, a short time before bought lot No. 13, on the original town plat, for eleven dollars. This is the property one hundred feet front on Broadway, by two hundred feet on Fourth st., being the southwest corner of those streets. The property, if divested of improvements, would now command, at sheriff's sale, two hundred thousand dollars.

Colonel John Riddle, already referred to, came to Cincinnati in October, 1790, and not long after bought of Scott Traverse, who owned the lot one hundred feet east from the alley on Front st. west of Sycamore, and two hundred feet deep, the west half of it being the lots now occupied by Messrs. Shoenberger & Co. and Thirkield & Co. For this and the entire improvements he paid sixty-six dollars and sixty-seven cents: although a very inferior building, it was considered of more value than the lot. Traverse,

afterward, laughed at him for not insisting on the whole lot, which he said he would have given him for the same sum, if he had asked him to do so. Colonel Riddle subsequently sold the lot to Samuel Stitt for twelve hundred dollars, and Stitt disposed of it, at perpetual lease, in 1832, for twelve hundred dollars per annum.

A letter from Dr. Wm. Goforth, one of the early settlers, to his friends in Philadelphia, under date of Fort Washington, September 3, 1791, gives the statistics of settlements and population for this vicinity to that date, with other incidents, thus: One of the Indian captives lately died at this place. His excellency, Gov. St. Clair, gave liberty to the rest to bury the corpse according to the custom of their nation: the mode is that the body be wrapped in a shroud, over which they put a blanket, a pair of moccasins on the feet, a seven days' ration by the side of the head, with other necessaries. The march from Fort Washington was very solemn. On their arrival at the grave, the corpse was let down, and the relatives immediately retired: an aged matron then descended into the grave, and placed the blanket according to rule, and fixed the provisions in such a manner as she thought would be handy and convenient to her departed friend. Casting her eyes about to see if all was right, she found the deceased was barefoot, and inquired why they had omitted the moccasins? The white person who superintended the whole business, informed her that there were no good moccasins in the store, but by way of amends they had put a sufficiency of leather into the knapsack to make two pairs, at the same time showing her the leather. With this she appeared satisfied, saying that her friend was well acquainted with making them.

The county of Hamilton lies between the two Miami rivers. Just below the mouth of the Little Miami, is a garrison called Fort Miami; at a small distance below this garrison is the town of Columbia. About six miles from Columbia is the town of Cincinnati, which is the county-seat of Hamilton county, and here is erected Fort Washington, the headquarters of the Federal army. This fort is pleasantly situated on the banks of the Ohio river. Seven miles below this is a settlement, of eighteen or twenty families, called South Bend. About seven miles from this, also on the Ohio river, is the city of Miami, founded by the Hon. John Cleves Symmes. Twelve miles up the Great Miami is the settlement called Dunlap's Station; and twelve miles up the Little Miami is a settlement called Covalt's Station. The number of militia in these places, according

to the best accounts I have received, are, at Columbia, two hundred; Cincinnati, one hundred and fifty; South Bend, twenty; city of Miami, eighty; Dunlap's, fifteen; and at Covalt's, twenty.

The First Currency of the West.—In the early days of Cincinnati, as throughout the whole west, considerable difficulty existed in making change. The first currency was raccoon and other skins. This lasted but a short time, the establishment of the garrison and the campaigns against the Indians bringing a fair supply of specie into the country. This being, however, either gold or Spanish dollars, did not relieve the natural difficulty of making change in the same currency. In this perplexity, the early settlers *coined* cut money—that is to say, the dollar was cut into four equal parts, worth twenty-five cents each, or again divided for twelve and a half cent pieces. This was soon superseded by a new and more profitable emission, from the same mint, which formed an additional quarter, or two additional eighths *to pay the expence of coinage*. This last description of change, which was nicknamed *sharp shins*, from its wedge-shape, became speedily as redundant as were the dimes of 1841, when they ceased to pass eight and nine for a dollar, and of course equally unpopular. I remember, as late as 1806, that the business house in Philadelphia in which I was apprentice, received over one hundred pounds of cut silver, brought on by a Kentucky merchant, which went up on a dray, under my care, to the United States mint for re-coinage, greatly to the loss and vexation of the western merchant. Smaller sums than twelve and a half cents were given out, by the retailers of goods, in pins, needles, writing paper, etc. Bartle, who kept store on the site of the Cincinnati Hotel, had a barrel of copper coins, brought out in 1794, which so exasperated his brother store-keepers that they had almost mobbed him; and the same feeling of contempt for copper money existed here in those days, which even yet exposes a store-keeper to insult in offering them to a certain description of customers.

All kinds of merchandise were high in price, and in demand at Fort Washington. The army was cantoned at Hobson's Choice, just below where Park street now is. Money plenty;—the currency, with the exception of some specie, was all of the paper of the old Bank of the United States. A great proportion of the circulation was in bills of three dollars, three dollars being then the monthly pay of a private soldier. It was a common expression,

with the troops, to call the bank bills *oblongs*. This was more especially the case at the gambling tables. Gambling was much practiced among the officers and retainers of the army.

Early Navigation of the Ohio.—Colonel James Ferguson, who survived his cotemporary pioneer associates of 1791 and 1792 to a recent date, conversing on this subject, observed: In 1790, I was trading on the Ohio river, and made several trips, up and down, from Pittsburgh to Cincinnati. In 1791, 1792, 1793, and 1794, I made two trips each year, being, at these latter periods, keeping store in Cincinnati. Produce and goods were brought down from Pittsburg and Redstone in Kentucky boats—a small keelboat, with sharp roof cover over the principal part, leaving a small section of the boat for oars, which were used, as in a skiff, below, the steepness of the roof not permitting the use of oars above—more generally, however, the transportation was in flatboats. We went up in a canoe, poling where the water was shallow enough, and bushwhacking or poling along the shore by the bushes, as opportunity served, and paddling the canoe in the intervals of deep water. We usually made thirty miles a day in this mode. As soon as we got to Wheeling, we went on foot to Pittsburg, it being less fatiguing and costing less time to walk fifty-seven miles, the land distance, than to pole and paddle ninety miles, the distance by the river.

Col. Ferguson recollected the Wetzels, who, with Jacob Fowler, and other pioneers, more than once accompanied him on his river passages. Fowler, he remarked, poled his canoe with great vigor and skill.

These voyages, as late as 1793, were attended with considerable danger from the Indians, who, up to that period, were hostile to the whites. Ferguson had repeatedly to camp out on shore, building a fire, when the nights were so cold as to render it absolutely necessary to do so for health, and not daring to stay by it more than a few minutes at a time to obtain warmth sufficient, and then retreating to the spot selected for sleeping at such a distance off as not to expose him to the view of an enemy who might cautiously steal up and, directed by the light of the fire, obtain a full and distinct view of his person as an aim by which to direct his rifle.

In 1794, T. Greene, of Marietta, carried the mail between Pittsburg and Cincinnati in a pirogue or large canoe, propelled also by poles and paddles. This boat, in her downward passage, carried some little freight and occasionally, for a slight compensation,

passengers. My informant, a resident of this city, states that he has taken passage thus from Marietta to Wheeling. The only use of the paddle was to take the boat across the river from deep to shoal water, the force of paddling not being sufficient to propel a boat up stream with passengers.

The first regular and periodical line of packets, between these named places, was formed January 11, 1794, by the establishment of four keelboats, of twenty tons each, as appears by the following advertisement in the "Centinel of the Northwestern Territory," printed at Cincinnati, by William Maxwell. Two things, in this notice, will strike the reader forcibly. Four boats, which could not, in the aggregate, have carried half the load which is now taken, in a single trip, on one of our smallest Maysville boats, were supposed to suffice for a month's transportation business for the whole country between Pittsburg and Cincinnati. And these boats were provided with arms and ammunition to protect the passengers from apprehended danger from the savages:

OHIO PACKET BOATS.—Two boats, for the present, will start from Cincinnati to Pittsburg, and return to Cincinnati, in the following manner, viz:

First boat will leave Cincinnati, this morning, at eight o'clock, and return to Cincinnati; so as to be ready to sail again in four weeks from this date.

Second boat will leave Cincinnati on Saturday, the 30th instant, and return to Cincinnati as above.

And so, regularly, each boat performing the voyage to and from Cincinnati to Pittsburg, *once in every four weeks*.

Two boats, in addition to the above, will shortly be completed and regulated in such a manner that one boat of the line will set out weekly from Cincinnati to Pittsburg, and return to Cincinnati in like manner.

The proprietor of these boats having maturely considered the many inconveniences and dangers incident to the common method hitherto adopted of navigating the Ohio, and being influenced by a love of philanthropy, and a desire of being serviceable to the public, has taken great pains to render the accommodations on board the boats as agreeable and convenient as they could possibly be made.

No danger need be apprehended from the enemy, as every person on board will be under cover, made proof to rifle or musket

balls, and convenient port-holes for firing out. Each of the boats is armed with six pieces, carrying a pound ball; also a good number of muskets, and amply supplied with plenty of ammunition, strongly manned with choice hands, and the master of approved knowledge.

A separate cabin, from that designed for the men, is partitioned off in each boat for accommodating ladies on their passage. Conveniences are constructed on board each boat so as to render landing unnecessary, as it might, at times, be attended with danger.

Rules and regulations for maintaining order on board, and for the good management of the boats, and tables accurately calculated for the rates of freightage for passengers, and carriage of letters to and from Cincinnati to Pittsburg; also a table of the exact time of the arrival and departure to and from the different places on the Ohio, between Cincinnati and Pittsburg, may be seen on board each boat, and at the printing office in Cincinnati.

Passengers will be supplied with provisions and liquors of all kinds, of the first quality, at the most reasonable rates possible. Persons desirous of working their passage, will be admitted, on finding themselves subject, however, to the same order and directions, from the master of the boats, as the rest of the working hands of the boat's crew.

An office of insurance will be kept at Cincinnati, Limestone, and Pittsburg, where persons, desirous of having their property insured, may apply. The rates of insurance will be moderate.

The Pioneer Periodical Press.—The first newspaper started here was "The Centinel of the Northwest Territory." William Maxwell, editor and publisher. It bore as a motto, "Free to all parties, but influenced by none." The first number was issued November 9, 1793. The postoffice having been recently established, Maxwell was commissioned postmaster. The paper was in size one-half what would form a sheet of royal, hardly larger than one of our modern window panes of glass in first class dwellings. If the paper was small, it sufficed for the advertisements and news. It was nominally a weekly paper, but owing to the difficulty of obtaining regular supplies of printing paper, was not remarkably regular in its issue. His issue of April 12, 1794, gave Marietta dates to the 4th; from Lexington, Ky., to the 22d March; from Nashville to the 10th March; from New York to the 15th February; and from London to the 25th of November of the

preceding year! Two or three extracts, which follow, may be accepted as giving something of the form and pressure of pioneer times.

LEXINGTON, March 22.

On the 16th instant the Indians stole ten horses on Lecompt's run, and on Tuesday night last stole a number more from the same neighborhood.

Last week the Indians killed four persons in one family on the Rolling Fork of Salt river.

Extract of a letter from Nashville, dated March 10.

The Indians are very troublesome in our country; they have killed a number of persons, and in the ensuing summer we much dread, as they appear to be on all quarters of our frontiers, though we have had success with them lately. They killed a man not far from this place, and a party pursued them as far as the Tennessee, where they came up with them and encamped, and killed eleven fellows and took two squaws prisoners, which was the whole of the party; since which we have lost eleven men on our frontiers within about four weeks.

CINCINNATI, April 12.

On Tuesday, the 11th instant, the General Court opened at this place agreeably to adjournment, from October last, before the Hon. Judge Turner. The procession from the Judge's chambers to the public ground was in the following order:

Constables, with Batons,
 Sheriff and Coroner, with White Wands,
 Goaler,
 The Honorable Judge,
 Clerk, with a Green Bag,
 Judges of the Common Pleas,
 Justices of the Peace,
 Attorneys, Messengers, etc.

II. PHYSICAL CHARACTERISTICS.

SITE.

CINCINNATI, the largest and most important city in the United States west of the Atlantic slope, is nearly central to the population of the Republic, the exact centre being a point in the State of Ohio just below Marietta. It is also central to the great valley of the Ohio, comprehending 220,000 square miles of area.

The plain on which the city rests, forms a portion of the Ohio valley, about twelve miles in circumference, bisected by the Ohio river, which passes through it in a course from northeast to southwest. On the right side of the river is Cincinnati, and on the left, immediately opposite, are the towns of Brooklyn and Jamestown, and the cities of Newport and Covington, the latter two places separated by the river Licking. This great plain is entirely surrounded by hills, three hundred feet in height, forming one of the most beautiful natural amphitheatres to be found anywhere on the continent, from whose hill-tops may be seen the splendid panorama of Cincinnati, Covington, and Newport, with the winding Ohio, its steamers and barges, and all the incessant movement along its shores. While Philadelphia, New Orleans, Chicago, Buffalo, and even New York, are built on level ground, and afford scarcely any distinct variety of position, the site of Cincinnati is one on which the eye of taste might rest with delight, while the various natural advantages, which the city and its environs present, attract the attention of the man of business or the mere resident.

Cincinnati occupies a front on the river Ohio of six miles, with an average depth for its northern limits of one and one-fifth mile, embracing an area of 4521 acres, of which 1126—nearly one-fourth of the whole—are not yet sub-divided into city lots. The space within its corporate limits, thus left vacant, is more than made up by adjacencies east, west, and north, many of which are as compactly built up as the average of Cincinnati itself.

The city is nearly central by river navigation to Pittsburg, at the head of the Ohio, and to Cairo, its outlet, being about 438 miles, by water, from each. It is a point in the direct line from Balti-

more to St. Louis, as well as a centre from which radiate in all directions a great diversity as well as great extent of railways.

The following table gives the levels of Cincinnati and its vicinity. They are calculated from low-water mark in the Ohio river:

	FEET.
Extreme flood in 1832,.....	61.61
Surface of Whitewater Canal,.....	54.00
Average height of Lower Level of City,.....	57.00
Average height of Upper Level of City,.....	116.00
Surface of Upper Level of the Miami Canal,.....	110.00
Height of Base of the Reservoir,.....	149.65
Surface of the Reservoir,.....	175.65
Mt. Adams, at Observatory,.....	396.00
Walnut Hills, Montgomery and Madison roads,.....	414.00
Mt. Auburn, at Reeder's residence,.....	459.00
Jackson Hill,.....	426.00
Vine street Hill, west of Vine street,.....	453.00
Ross Hill or Riddle's Woods,.....	418.00
Mt. Harrison, west of Millcreek,.....	460.00

The platform of the city was originally formed of three levels or terraces, all sloping from the Ohio northwardly. The first of these extended from the bluff bank of the river to the base of the gravelly hill, which ranged nearly parallel with what is now Third st. The second of these terraces stretched to the hills north of the corporation line; and the third embraced the yet higher elevations which form the city boundary at its northern edge or line. The grade of these terraces has been for years changed, to conform to the general improvement of the city, and now affords the safe and facile ascent and descent required for heavy draughts, as well as the convenient discharge of water from the upper table of Cincinnati.

Cincinnati stands in Lat. $39^{\circ} 6' N.$, and Long. $84^{\circ} 29' 30'' W.$ The elevation of the surface of the river, at low water, above the level of the sea, is four hundred and thirty-one feet; that of the lower plain, about four hundred and ninety; that of the upper, five hundred and forty-three; that of the surrounding hills, on an average, not far from eight hundred and fifty feet.

CLIMATE.

The following synopsis has been compiled from notices furnished me by the late Dr. D. Drake, whose name is sufficient to attest the accuracy and value of the statistics. It was intended for publication in "Cincinnati in 1851," but reached me too late for that pur-

pose. The lapse of time since, however, detracts nothing from the appropriateness of the article.

MEAN TEMPERATURE OF THE YEAR AND SEASONS.

Mean Heat of the year.	Coldest year.	Hottest year.	Difference.	Greatest Cold.	Greatest Heat.	Extreme Range.	Mean Heat of Winter.	Mean Heat of Spring.	Mean Heat of Summer.	Mean Heat of Autumn.	Number of years.
54°	51°	57°	6°	18°	100°	118°	33°	54°	73°	53°	21

MEAN HEAT OF THE MONTHS.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
33°	33°	43°	55°	63°	71°	75°	73°	65°	52°	42°	33°

GREATEST CHANGE IN TWENTY-FOUR HOURS.

35°	38°	43°	43°	46°	38°	39°	35°	37°	41°	44°	36°
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MEAN HEIGHT OF THE BAROMETER FOR FOURTEEN YEARS.

Year.	Winter.	Spring.	Summer.	Autumn.	Inches and Decimals.
29.352	29.333	29.285	29.319	29.356	

MEAN MONTHLY PREVALENCE OF THE WIND, FOR SIX YEARS:

TWO OBSERVATIONS A DAY.

Months.	S. E.	S.	S. W.	N. E.	N.	N. W.	E.	W.	Calm.	Wind.
January.	6	2	13	8	1	21	3	6	6	N. W.
February.	5	1	13	8	1	14	0	5	8	"
March.	10	1	16	11	1	10	0	5	4	S. W.
April.	7	0	24	10	1	8	1	3	5	"
May.	7	1	19	10	0	10	1	4	6	"
June.	9	1	23	12	5	7	1	2	3	"
July.	6	1	19	11	2	11	1	4	4	"
August.	6	1	23	10	1	12	1	1	6	"
Sept'ber.	6	1	23	9	0	8	2	3	3	"
October.	9	1	24	6	1	10	2	4	3	"
Nov'ber.	9	3	13	6	1	10	2	7	5	"
Dec'ber.	7	1	11	5	0	15	2	6	9	N. W.
Year.	87	14	221	106	14	136	16	50	62	S. W.

NUMBER OF CLEAR AND CLOUDY DAYS—MEAN OF FOURTEEN YEARS.

	Jan.	Feb.	Mar.	Apr.	Ma.	Ju'e.	J'ly.	A'st.	Sep.	Oct.	Nov.	Dec.	To'l.
Clear d's.	15	15	17	18	18	18	21	19	20	19	14	13	207
Cloudy "	16	13	14	12	13	12	10	12	10	12	16	18	158

QUANTITY OF SNOW AND RAIN, IN INCHES, TENTHS, AND HUNDRETHS: MEAN OF THIRTEEN YEARS.

3.19	3.00	3.27	3.50	5.12	5.75	4.28	4.58	3.42	3.64	3.72	3.72
In the year 47.2 inches—least in Feb., most in June.											

Cincinnati occupies a position in the valley of the Ohio river which makes its climate, in some degree, a representative of all the climates of the valley. In going south from this city, the mean heat of the year rises, about a degree and two-thirds, for every degree of latitude; and sinks at nearly the same rate in going north. The pleasantest and perhaps, also, the healthiest periods of the year in this city are in spring, from the first of April to the first of June; in autumn, from the last week of September to the middle of November. The western precincts of the city and the surrounding country, are, however, more or less affected with bilious fever in the latter period. Those who go into the country, in summer, would do well, therefore, to return to the city early in September. I have been told, by physicians, that nearly all the bilious fevers which occur in the central parts of the city, are contracted by removing into the country after the first of that month.

Dr. Drake's observations give the mean annual amount, for thirteen years, of rain and melted snow here at 47.02 inches. Prof. Ray, of Woodward College, made the same calculation, for sixteen years, with an average of 48.42 inches. This included three years, 1835, 1836, and 1837, with more of a rainy average than that of the thirteen later years constituting Dr. Drake's table.

It may be interesting to compare our climate, in this respect, with that of Philadelphia, which lies in a latitude not differing greatly from ours.

By the journal kept at the Pennsylvania Hospital, for thirteen years, comprehending the same period embraced in Dr. Drake's table, it appears that the mean annual fall of rain in Philadelphia, during that period, was 45.24 inches. It will be found, on the examination of the daily registers, that a fall of six inches of rain, in as many successive days, is no uncommon circumstance in the rainy seasons. This is equal to five hundred tons in weight, or more than one hundred and twenty thousand gallons, in measure, to the acre.

The average amount of rain at St. Petersburg is 19 inches; at Paris and at Rome, 21 inches; at London, 27, and as an average for England, 30 inches; at Naples, 37 inches. In tropical countries 60 inches have fallen in a month, and 200 inches, almost, in a year.

I have ascertained and recorded these facts to correct the universal impression prevalent, that more rain falls in the British isles,

for example, than in the United States. That there are more cloudy and rainy days there is doubtless true, but these tables show that nearly twice as much rain falls at Cincinnati as at London—the difference between the two climates being that our rains are of a more drenching character, and fall in less space of time than theirs. As a consequence the earth does not drink up the rain as fast as it falls, and the heavy showers after saturating the earth, pass off to and swell our water-courses. The rains of Philadelphia are nearly embraced in forty-five days, and those of Cincinnati in thirty-eight days of the entire year. It is the extreme heat of summer, and the long period of intermission between rains in this country, which constitute the great cause of the aridity of our climate, and the great difference in richness of pastures and crop-product to the acre, that exists between us and England.

TIME TABLE.

DIFFERENCE IN TIME BETWEEN CINCINNATI AND THE PRINCIPAL CITIES OF THE UNITED STATES AND CANADAS.

FAST.					SLOW.	M. S.		
M. S. Dunkirk, N. Y.,	20	33	Philadelphia, P.,	37	20			
Annapolis, Md.,	33	02	Dorchester, Mass.,	53	42	Chicago, Ill.,	12	
Albany, N. Y.,	43	00	Dover, Del.,	35	59	Pittsburg, Pa.,	17	
Auburn, N. Y.,	32	07	Erie, Pa.,	17	34	Portland, Me.,	57	
Augusta, Ga.,	10	23	Frederickton, N.B.	70	59	Princeton, N. J.,	39	
Alexandria, Va.,	29	43	Hartford, Conn.,	47	16	Portsmouth, N.H.	54	
Baltimore, Md.,	31	29	Halifax, N. S.,	83	33	Quebec, C. E.,	52	
Boston, Mass.,	53	42	Huron, O.,	07	49	Raleigh, N. C.,	22	
Buffalo, N. Y.,	22	09	Hudson, O.,	12	20	Rochester, N. Y.,	26	
Burlington, Vt.,	45	19	Lowell, Mass.,	52	43	Richmond, Va.,	28	
Bangor, Me.,	62	51	Lexington, Ky.,	00	47	Springfield, Mass.	47	
Columbus, O.,	05	47	Montpelier, Vt.,	47	35	Springfield, O.,	02	
Cambridge, Mass.,	53	27	Montreal, C. E.,	43	39	Salem, Mass.,	54	
Charleston, S.C.,	18	09	N. Haven, Conn.,	46	12	Sandusky City, O.	07	
Cleveland, O.,	11	18	New York,	41	54	Toronto, C. W.,	20	
Concord, N. H.,	52	03	Newport, R. I.,	52	42	Toledo, O.,	03	
Detroit, Mich.,	06	07	Norfolk, Va.,	32	44	Trenton, N. J.,	39	
Dayton, O.,	01	04	Norwich, Conn.,	49	31	Washington, D.C.	29	
						59	St. Paul's, Min.,	34
							32	

III. PERSONAL STATISTICS.

POPULATION.

THE United States census of 1850 gives the population of Cincinnati as 115,438. If Fulton, at that time one of our suburbs, but now included in the city limits, be added, these figures would be raised to 118,761. There can be no doubt, however, that our actual population, at this period, was considerably greater than thus appears. The cholera was raging, with great virulence, here at the time, and its approach or arrival had put to flight great numbers of the inhabitants. How largely this state of case must have reduced the official census, may be inferred from the result of an enumeration, in 1853, made for a special purpose, when our numbers were ascertained to be 161,186.

The population, at present, may be reasonably estimated at 225,000, computing by our regular ratio of increase for the past seventeen years, and the census of 1860, if correctly taken, will increase those figures to 250,000.

The following comparative table will afford a contrast of the progress in the population of Cincinnati, with that of other cities in the Ohio and Mississippi valley:

	Cincinnati.	Pittsburgh.	Louisville.	New Orleans.
Census of 1800	750	1,565	600	9,650
" 1810	2,540	4,768	1,350	17,242
" 1820	9,602	7,243	4,012	27,176
" 1830	24,831	21,412	10,306	46,310
" 1840	46,338	36,478	21,214	102,296
" 1850	118,761*	67,871	43,277	120,951
" 1853	160,186	—	57,535†	—

The colored population of Cincinnati, in 1826, amounted to 690 persons—the white inhabitants at that date being 15,540. They constituted, therefore, one in twenty-four of the entire population. In 1840, they had so far increased as to form one in twenty or more exactly 2,258 of the 46,382 persons returned in the census of Cincinnati at that date. In 1850, they were but 3,172 in

* Including Fulton.

† 1857.

118,761, or less than one in thirty-seven of the entire inhabitants of Cincinnati.

The increase of population here from 1830 to 1840, was ninety per cent. From 1840 to 1850, without allowing for the deficiency in the last census referred to, the ratio was one hundred and fifty per cent. Cincinnati may therefore be placed in the number of those cities, in the United States, whose growth is not exhausting the elements, or diminishing the ratio, of their progress. And it will be found, on a comparison of this with other cities in our country of equal or greater magnitude, that there is no one whose ratio of increase for the last eighteen years has been so large. Nor is there any whose absolute increase is so great, except Philadelphia and New York cities—the one concentrating the most extensive mining and manufacturing operations in the United States, and the other being the great emporium of its foreign and domestic commerce.

In estimating our population at this time to be 225,000 inhabitants, it should be observed that I do not include the cities of Covington and Newport, in which many of the persons doing business here reside, and which are as really appendages of Cincinnati as the great part of the suburbs of Philadelphia, which are now incorporated within the city limits, are of that place. These cities would swell our population to 250,000 souls.

NATIVITIES.

A large share of the inhabitants of Cincinnati, as is the case in most of our large cities, is composed of foreigners. Among these the German element preponderates largely, being more than two-thirds of the whole. The Irish is the next largest, and, with the natiivities of the other British isles and dependencies, make up nine-tenths of the residue. Almost every part of the world, in small proportions, is represented here. Foreigners, thus, with their children born here, constitute more than half our population. Of the natives of the United States, those of Ohio make up three-fourths of the aggregate. Pennsylvania, New York, Virginia, Kentucky, Maryland, New Jersey, and Indiana, are of successive importance as to numbers. The entire New England ingredient does not more than equal that of either Virginia or Kentucky, and is not

more than half that of Pennsylvania. Every State and Territory in the United States is represented here.

The Irish constitute the largest share of foreigners in the First-Third, Fourth, Thirteenth, and Seventeenth wards. In the other wards, the Germans greatly outnumber all other descriptions of emigrants. As a general rule, therefore, the Irish reside in the vicinity of the river, and the Germans occupy our territory to the north and north-west. These last, to a great extent, own the property on which they reside, and the high price of ground in the central and business parts of Cincinnati, together with their pre-occupation for other purposes than dwellings, has concentrated the Germans on the upper line of the city.

A comparative view of the facility with which these heterogeneous elements become swallowed up in the absorbing and fusing process, now and for the future in progress, which is destined to render the Anglo-American race paramount throughout this great continent, would be sufficiently curious, although too extensive a subject to be brought into discussion here. It may suffice to say, that of all classes of foreigners, the German soonest assimilates to the great mass. It takes but one generation to obliterate all the distinctive marks of this race—even of language, usually a most tenacious feature. On the contrary, the Irishman, whose dialect does not differ much, except in accent and tone, from ours, retains his family identity for several generations. So, also, but in a less degree, with the English and Scotch.

To the industry of foreigners, Cincinnati is indebted, in a great degree, for its rapid growth. Their presence here has accelerated the execution of our public improvements, and given an impulse to our immense manufacturing operations, without which they could not have reached their present extent and importance.

IV. PUBLIC AUTHORITIES.

COURTS OF JUDICATURE.

BESIDES Justices of the Peace, there are in Cincinnati the following courts, viz: The District Court for the First Judicial District of Ohio, the Court of Common Pleas of Hamilton County, the Superior Court of the City of Cincinnati, the Probate Court of Hamilton County, and the Police Court of the City of Cincinnati.

1. *The District Court* meets on the first Monday of April and October of each year, and is composed of one Judge of the Supreme Court of Ohio and three Judges of the Court of Common Pleas, who are *ex officio* Judges of this Court, and any three of whom are a quorum for the transaction of business. Its jurisdiction is, within its district, co-extensive with that of the Superior Court of the State; it may issue writs of "mandamus" and "quo warranto," and all other necessary process for the due administration of justice in civil cases, but has no criminal jurisdiction except as a court of errors.

2. *The Court of Common Pleas.*—By the Constitution of 1852, Hamilton county is erected into a Judicial District, with three Judges of the Court of Common Pleas, elected by the people of the county, and holding their offices for the term of five years. The terms of the court commence on the first Mondays of January and November, and the second Monday of May in each year. Three separate branches of this court are held, each presided over by one judge, and at the commencement and close of each term or oftener, if they deem advisable, the judges meet in joint session for the regulation of the business and apportionment of the docket among the several judges. It has exclusive jurisdiction of all criminal cases which are required to be prosecuted by indictment or presentment of a grand jury, and of writs of error and *certiorari* to the Police Court of Cincinnati, and Magistrates' Courts in criminal cases, of which said courts have final jurisdiction. It has also original jurisdiction in law and equity of all cases where the sum or matter in dispute exceeds the jurisdiction of a Justice of the Peace, and concurrent jurisdiction with the Probate

Court in the sale of lands by administrators of the estates of deceased persons, and appellate jurisdiction of cases within the cognizance of Justices of the Peace, as also from the action of the Board of County Commissioners in matters pertaining to their office. It also determines all contested elections for county officers, appoints a Commissioner of Insolvents, etc., and fixes the number and rate of compensation of the deputies of the Sheriff and Clerk of the county employed in this court. The Judges, whose terms will expire in 1862, are Hons. A. G. W. Carter, W. M. Dickson, and P. Mallon. Salary, each two thousand dollars per annum.

3. *The Superior Court of Cincinnati* was established April 7, 1854, and has concurrent jurisdiction with the Court of Common Pleas in all civil cases arising, or where one of the defendants resides within the city of Cincinnati. It has no appellate jurisdiction, nor jurisdiction of writs of error to inferior tribunals, nor of cases of divorce or alimony, nor of any cases not specifically given by the act of its creation. A writ of error to this court in general term, lies directly to the Supreme Court of Ohio. It consists of three Judges, who hold separate or special monthly terms, commencing on the first Monday of each month, except July, August, and September. General terms for the consideration of petitions in error, to review errors in law of the special terms, are also held monthly at the commencement and close of the month. All the Judges set in general term, any two of whom are a quorum. The Judges of the Superior Court are elected at the general spring election, and hold their office for five years. The salary is three thousand five hundred dollars per annum, fifteen hundred of which is paid by the State, and two thousand by the city of Cincinnati. The present incumbents, with their term of service ending, are Hon. W. Y. Gholson, 1859; Hon. B. Storer, 1862; Hon. O. M. Spencer, 1863.

4. *The Probate Court* has exclusive jurisdiction in the probate of wills, granting letters of administration and testamentary, settling the estates of deceased persons, and ordinary distribution of estates, the appointment and removal of guardians and settling their accounts, the granting of licenses to marry, etc.; also to hold inquests of lunacy, and for fixing the amount of compensation to be made to owners of real estate appropriated by corporations under the law, and to try contested elections for Justices of the Peace. Besides this it exercises concurrent jurisdiction with the Court of Common Pleas—1st. In the sale of lands on petition by executors and

administrators, and the assignment of dower in such cases of sale; 2d. In the completion of real estate contracts on petition of executors and administrators; 3d. In allowing and issuing writs of habeas corpus, and determining the same; 4th. To administer oaths, take acknowledgments of deeds, etc.; 5th. Of proceedings in aid of execution. The Probate Judge is clerk of his own court; is elected for three years by the people of the county, and is compensated by fees which are fixed by laws. G. H. Hilton, Judge.

5. *The Police Court of Cincinnati* has exclusive jurisdiction in all cases of breaches of the city ordinances, and the same powers and jurisdiction in criminal cases, arising under State laws, that are by law vested in Justices of the Peace of the county, and like power in the Judge to take acknowledgments of deeds and other writings. It has also final jurisdiction in all cases of petit larceny and inferior offences of every description committed within the limits of the city or within one mile thereof, which, by the constitution and laws of the State, are not required to be prosecuted by indictment or presentment of a grand jury. No appeal lies from this court to the Court of Common Pleas, but its proceedings may be reviewed and reversed by *certiorari* issued from the latter court. The Judge of the Police Court is elected by the voters of the city, and holds his office for two years. His salary, two thousand dollars, is paid out of the city treasury, but the County Commissioners make an additional allowance for his services under State laws. D. P. Lowe, Judge. The Mayor of the city, in the absence or disability of the Police Judge, presides in said court, and performs his duties. He is elected by the voters of the city for two years, and receives a salary of two thousand dollars a year out of the city treasury.

LEGISLATIVE AND EXECUTIVE DEPARTMENTS.

The fiscal and prudential concerns of the city, with the conduct, direction and government of its affairs, devolve upon the Mayor and a Board of Trustees of two members from each ward, usually known by the name of City Council, and a Board of City Improvements, composed of the Mayor, City Civil Engineer, and three City Commissioners.

The Mayor is elected biennially on the first Monday of April.

He must be an elector and reside within the limits of the city. He is the chief executive officer and conservator of the peace, and it is made his special duty to cause the laws and ordinances of the city to be obeyed. He has the appointment of police and the supervision of the conduct of all the officers of the city, and it is his duty to examine the grounds of all reasonable complaints made against them, and cause all their violations of duty or their neglects to be promptly punished or reported to the proper tribunal for correction. He shall keep the corporate seal of the city in his charge, and sign all commissions, licenses and permits granted by the City Council. It is made his duty to report to the City Council at their second regular meeting in April, each year, and at such other times as he may deem expedient, concerning the municipal affairs of the city, and recommend such measures as to him may seem advisable. He has within the county, in all criminal cases, all the powers of a Justice of the Peace, and can exercise within the city limits the powers conferred upon the Sheriff of the county to suppress disorders and to keep the peace. Salary two thousand dollars per annum.

The Trustees composing the *City Council* are elected biennially, one in each ward, being elected at the annual election in April, each member serving two years. They must be residents and qualified voters of the ward in which they are elected. They determine the rules of their own proceedings, and it is made their duty to keep a journal thereof, open to the inspection of every citizen. They are required to take an oath of office, administered by the Mayor, and to elect from their own body a president, who is to preside over its meetings, and, when necessary, act as its representative. They appoint, from the qualified voters of the city, a City Clerk, who has the custody of all laws and ordinances of the city, and whose duty it is to keep a regular and correct journal of the proceedings of the City Council. They have the management and control of the finances, and of all the property, real and personal, belonging to the corporation. They can make no appropriation unless money is in the treasury, and they have no power to authorize any loan or appropriation not predicated on the revenues of the corporation for the current fiscal year, except for the purpose of purchasing necessary grounds and erecting suitable buildings for the use of the public schools. Loans may, however, be made in anticipation of the revenue of the current fiscal year and





John St. Paul's Church, N. York

Engraving by J. H. Thompson

1850



payable within such year to the amount of one hundred thousand dollars. They have power to establish a Board of Health, and may provide for the election by the people or appointment by the Mayor of a police and city watch, and to establish and regulate markets, wharves and fire companies, and to license and regulate public shows. They are authorized to abate nuisances, to appropriate ground for new streets or alleys; to open, straighten, widen or repair streets; to license and regulate wagons, drays, hacks, etc.; and to levy and collect taxes for city purposes; and it is made their duty to publish, for the information of the citizens, a particular statement of the receipts and expenditures of the public moneys. They have entire control of the township property, and all the duties performed previous to 20th March, 1853, by the Township Trustees, are performed by the Directors of the City Infirmery, under the control of the City Council. They are authorized and required, at the expense of the city, to provide for the support and regulation of the Common Schools of the city. No member can, during the term for which he is elected or for one year thereafter, be appointed to any municipal office which may have been created or the emoluments of which have been increased during the term for which he has been elected. Any member may be removed from office by a concurrent vote of two-thirds of all the trustees elected; but not a second time for the same cause. Vacancies are filled by special election ordered by Council. For their services the members receive one dollar per day, which is restricted to the actual meetings of the Board.

Board of City Improvements.—Under the new charter, passed by the Legislature, in 1853, a Board of City Improvements was created, “who shall exercise such powers and perform such duties in the superintendence and construction of public works, constructed by the authority of the City Council or owned by the city, as the said City Council may, from time to time, prescribe; but no improvement or repair in relation to streets, sewers and bridges shall be ordered or directed by the City Council, except on the report and recommendation of the said Board; and all petitions from owners of property in relation to such improvements, shall be presented to such Board, who shall report, from time to time, to the City Council, when any such improvements are necessary and proper.

The *City Commissioners* are elected by the people for three

years, one being elected on the first Monday of April of each year. In case of vacancy, the City Council fills until the next annual city election. It is made their duty to enforce the ordinances and contracts of the city.

A City Marshal, City Treasurer, City Auditor, City Civil Engineer, City Solicitor, Police Judge, and Prosecuting Attorney of the Police Court, are elected biennially by the qualified voters of the city on the first Monday in April.

Mayor, N. W. Thomas; Marshal, Benjamin Robinson; Chief of Police, J. L. Ruffin.

V. EDUCATION.

PUBLIC INSTRUCTION in the United States is divided generally into three kinds: that of Schools—so called—that of Academies, or more recently called High Schools; and lastly, that of Colleges, or when Professional Education is added, Universities. The object of these three classes of institutions is to convey three different kinds or gradations of education, according to the time and means which the pupils or students have to spare. The Primary Schools, whether public or private, simply teach the *elements* of knowledge, such as reading, writing, grammar, arithmetic, and geography. The object of Academies or High Schools, is to give some knowledge of higher studies; such as mathematics, history, or the classics. The object of Colleges is to afford, what is termed, a thorough classic education, being a course of instruction in the Sciences, the Classics, Philosophy, and Belles Lettres. To this course is generally added a supplementary one—in Law, Medicine, and Theology—open to volunteer students for professional life. When a college has classes in these subjects, it is termed a University; an institution in which, it is presumed, instruction is given in all branches of human knowledge. In addition to these means of instruction, there are, in large cities, societies and rooms established for popular lectures, or popular reading; such as Lyceums, Mechanics' Institutes, and Mercantile Libraries. The means of education, whether public or private, are thus *diffused* in the United States through all classes of people; and there are none who cannot, if they choose, find access to useful instruction in almost any department of knowledge.

Before Cincinnati attained one-third its present magnitude, all these modes of education had been established in the midst of its population successfully and prosperously. Our schools have attracted the notice of persons of the highest intelligence, both in Europe and America. That the means and system of education adopted in Cincinnati may be clearly understood, a brief review of its schools, colleges and other institutions for the acquisition of knowledge, follows.

Primary Schools.—Of these we have three different kinds—the Public, or City Schools; Parochial, or Church Schools; Private, or Individual Schools. The present system of public schools was established in Cincinnati in 1830–31.

In these “colleges of the people,” as they are termed, the children of the masses of the people, of all conditions, are educated. There they acquire, in the short time most of them can spare for education, those simple elements of knowledge which are most useful in common life. The majority of children who enter these schools, probably obtain little other knowledge than that of reading, writing, and arithmetic; but the instruction afforded by the schools is not confined to these elementary branches. On the contrary, the studies of the older and higher classes exhibit ample proof that a wide range of study and acquisition is included in the scheme of Public Education. To this may be added, that these Public Schools are literally FREE; those attending them having all the advantages which the best course of elementary instruction can confer, without price, charge, or special tax.

Of Funds.—The funds by which the Public Schools of Cincinnati are sustained, are derived from two sources: *first*, the city's portion of the State School Fund; and *secondly*, by a direct tax on the property of the city in proportion to the wants of the schools. The State has granted \$200,000 per annum, heretofore, to the Public Schools—and it is probable will increase that sum in future—in addition to the tax, which the several school districts pay, or the other funds they have. Cincinnati has her portion of this general fund; then she taxes herself to the additional amount required for the support of the schools. For many years the city has paid two-thirds of the whole. Of the city school tax, about one-fourth or one-third, is called the Building Fund, and is permanently appropriated to the repair, furnishing, and erection of

buildings. The total amount of school revenue in Cincinnati, for the fiscal year 1858, was \$205,569.

Organization.—The public schools of Cincinnati are managed and controlled by three distinct sets of officers, each of which has distinct duties, and all of which result in a very simple and easily controlled system. These are the Board of Trustees, the Board of Examiners, and the Corps of Teachers. These are entirely separate bodies, but are harmonious and efficient in the school government of the great body of youth committed to their care.

1. The Trustees are elected by the people at the annual municipal elections, two for each ward, and have charge exclusively of what may be termed the business arrangements of the schools. Their duties are to make the necessary appropriations of money; to furnish, repair, and arrange the buildings; to prescribe the kinds of books employed in teaching; to appoint teachers, and make rules for their government, with all such powers as are incidental to the immediate government of the schools. 2. The Board of Examiners are appointed by the City Council, and their duties are to *examine* the teachers in respect to their qualifications and their pupils, whenever it seems to them proper. Without their certificate no teacher can be appointed. 3. The Corps of Teachers perform their duties of instruction and government under and in conformity to rules prescribed by the Trustees. The public teachers now number two hundred and seventy-eight, being more than twice the force employed in 1850, and four times that of 1840; thus indicating very clearly the progress in numbers and property of our public schools. A difference is made in the age, qualifications and salary of teachers, in proportion to the age and standing of the classes under their charge. For small children, young girls are frequently employed, while for the higher classes of boys, men of intelligence, as well as aptness to teach, are required. The qualifications of the teachers are generally amply sufficient for all the instruction they are expected to give.

Buildings.—The school buildings of the Public Schools are sixteen in number, constructed on a uniform plan, and conveniently arranged for the objects in view. They are capable of accommodating—including both day and night schools—full nine hundred pupils each. In addition, there are two other buildings used for the purposes of Public Instruction: one of which is the City In-

firmary, and the other the Orphan Asylum, where pupils are under the care of the Common School Instructors.

Course of Studies.—The studies range, according to the age and capacity of pupils, from spelling and definition, reading, writing, grammar, including composition, elements of drawing, penmanship, geography, United States history, mental and written arithmetic, natural history, music, linear drawing, elements of natural philosophy and of algebra, analysis of language, constitutions of the United States and of the State of Ohio, declamation, drawing, to the elements of geometry, plane trigonometry, mensuration and surveying. It has never been *intended* by the trustees of Public Schools, in Cincinnati, to *limit* the amount of knowledge to be acquired in the schools. As there are, however, but few of the pupils who can spare the time required for a study of general science, the trustees have provided for those who need such studies, and are willing to pursue them, two High and four Intermediate Schools, which shall be referred to separately.

High and Intermediate Schools.—Within a few years past, there have been added to the ordinary public schools two High and four Intermediate Schools, for the benefit of those who have become so far advanced in the lower schools as they admit, and who desire to pursue a higher course of studies. In these High Schools—the Woodward and Hughes—are,

	Teachers.	Pupils.
Woodward High School,.....	6	176
Hughes' High School,.....	6	159
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>
Total,.....	12	335

To the Intermediate Schools are transferred pupils from the District Schools, who have made the requisite proficiency in study; and in due time such as acquire the proper standing in this, are again transferred to the High Schools. The Intermediate Schools are under the same government with the Common or District Schools; but the High Schools, which have been endowed by the individuals whose names they bear, are under the control of a Union Board of five delegates from the Common Schools, five from the Woodward, and two from the Hughes Boards.

The entire expenditure in the public schools, for the past year, is \$138,605 80, out of which have been maintained twenty District, four Intermediate, two High, one Normal, one Night High, and six Night District Schools.

STATISTICS OF TEACHERS AND SCHOLARS FOR THE LAST
EIGHTEEN YEARS.

	1840.	1850.	1858.
Pupils enrolled,.....	5121	12,240	17,685
Pupils in attendance,.....	3972	5,557	10,493
Teachers,.....	64	138	278
No. Pupils to Teachers,.....	62	40	37

It appears, thus, that the number of teachers employed in proportion to scholars has greatly increased, so that, in fact, much better instruction is given now than formerly.

From seventeen to eighteen thousand of the youth of Cincinnati are continually receiving instruction in our schools, and as the younger pupils advance and others take their places, changing the individuals taught, probably about every six years, it may be fairly presumed that two-thirds of those within the school limits, as respects age, are receiving instruction, more or less thorough, in the public schools. If to them we add those taught in parochial and private schools, there can be no doubt, that nine-tenths of the youth of Cincinnati are placed so far under educational influence as to be greatly in advance of the past generation in the acquisition of useful knowledge.

Parochial Schools.—The Catholic Schools are the only ones which are strictly parochial, although there are schools under the special care of the Methodists, and perhaps of other denominations. The following are the statistics of the Catholic Parochial Schools, as stated on the authority of this society:

The number of children in attendance, including those in Catholic High Schools, is 7,750; teachers, 78.

Private Schools and Academies.—Of these there is a very great number and variety, many of them of high excellence, embracing more than 150 teachers, and 4,000 pupils.

Wesleyan Female College, Vine street.—This is a highly prosperous institution, of long standing, and well and favorably known. It is under the charge of Prof. P. B. Wilber.

Cincinnati Female Seminary, S. W. cor. Seventh and Mound sts.

TEACHERS.

T. A. BURROWES, A. M.,

Moral Philosophy and Religious Instruction.

MILTON SAYLER, A. M.,

Ancient Languages, Mental Philosophy and Æsthetics.

FRANCES C. BAUMAN,

Mathematics.

H. E. FOOT, M. D.,
ANNA WAKEFIELD.

AMELIA E. MEISSNER,
SALLIE R. STEER,

English Branches.

ELLEN J. HOYT,

Penmanship.

VICTOR WILLIAMS,

Vocal and Instrumental Music.

MARY E. PALMER,

Assistant in Music.

ROBERT CONNER,

Painting, Drawing, etc.

S. VEITH,

Modern Languages.

An elegant building, with two spacious and airy halls, to be devoted, the one as a *Calisthenium*, and the other as a *Museum*, has recently been erected on the lot adjoining the Seminary.

The *Calisthenium* will be fitted up with the most approved apparatus for ladies—such as is known, by actual trial, to give elegance of carriage, grace of motion and symmetrical bodily development. This department will be under the personal management and instruction of Mrs. Barrett, of our city, so long and so successfully identified with the cause of physical education.

The *Museum* will be a sort of storehouse of nature; in which will be found a *Geological Cabinet*, a *Herbarium*, an *Aquarium*, and other products of Nature, both pleasing and instructive. It will be a safe depository, where our scientific friends may leave as many curiosities as they choose. We intend to make it one of the most attractive halls in Cincinnati.

This building, with its varied apartments, will be an altogether new feature in our Seminary; and will furnish attractions superior to those of any similar institution, we know of, in the United States.

A well-selected Library, comprising standard works of a popular cast on different subjects of study, and other miscellaneous works of a high literary character, has been placed in the Seminary for the use of the pupils.

Thus an opportunity is afforded them to extend their studies, and to gain such general intelligence as time will permit and intelligence prompt.

The Seminary is furnished with Apparatus for the illustration of

all important principles in Natural Science. Indeed, the rooms for this department, with their complete appointments for experiment and research, have been pronounced by impartial and intelligent judges unsurpassed by any in the country.

The Minerals and specimens of Primary Rocks, include a sufficient number to illustrate those branches very fully. The Cabinet is especially rich in its Fossils; some of the formations, both of Europe and America, being nearly perfected. The whole collection numbers more than seven thousand specimens, and affords the best possible advantages to the pupils in the study of Geology.

The Mount Auburn Young Ladies' Institute is located on the lofty eminence due north of Cincinnati, and within its corporate limits, but as entirely removed from all its contaminating and unhealthy influence as situations miles distant.

It commands a view of the entire city and suburbs, with a picturesque landscape including the beautiful Ohio for miles in extent, and the surrounding country dotted with towns and villages as far as the eye can reach.

The object had in view in its establishment, was to meet a demand long felt in the west for higher female education, equal to that enjoyed at the east, and thus avoid any occasion to send our daughters from home to finish their education, as has been the practice with many of late years.

To accomplish this many difficulties had to be overcome, among which, and not the least, was the procuring suitable teachers; persons of large experience; the highest order of talents; and of known ability. In the Rev. E. A. Crawley, D. D., so well known in the east as an accomplished scholar, and for many years at the head of a flourishing institution of learning, as well as in his associates, both male and female, who came to the west with him, and no less in such as have since been added to his corps of teachers, the highest expectations of its founders have been realized.

The course of study is thorough and complete. All *public exhibitions* are definitely repudiated. Four thorough *examinations* are held each session, which are open to the friends of the pupils. *Practical knowledge*, and not *outside superfluities*, is aimed at.

Apparatus, in no stinted measure, is furnished for every department, as well as a large and rare collection of *Mineralogical* and *Geological specimens*. A choice *Library* is commenced. A



EHRGOTT & FORBRIGER LITH. CINCINNATI, O.

MOUNT AUBURN FEMALE COLLEGE.



Reading-room, with the principal journals of this country and Europe, is open at all hours.

The most careful and affectionate attention is paid to moral and religious training:—sectarianism always excluded. Correct habits and lady-like deportment receive constant care and watchfulness.

That the laws of health may be regarded, and physical exercise be made a pleasure rather than an irksome task, a capacious *Calisthenium* has been erected and furnished, and daily practice is made imperative, under the direction of the female principal of the Institute.

The spacious building, a view of which is seen on the opposite page, has been erected with a view to the utmost completeness and convenience: and careful regard has been had to safety from fire, and to free ventilation. It is traversed by spacious halls, and heated throughout by steam, and lighted by gas. It is surrounded with fields, groves, and abundant private play-grounds.

For information or catalogues, address Rev. E. A. Crawley, D. D., Cincinnati, O.

Herron's Seminary for Boys, Seventh, between Walnut and Vine streets.

JOSEPH HERRON, A. M., PRINCIPAL,

Instructor in Rhetoric, Moral Science and English Literature.

MILETUS GREEN, A. M.,

Professor of Greek and Latin Languages.

MAXWELL P. GADDIS, JR., B. S.,

Professor of Mathematics and Natural Science.

JAMES E. SHERWOOD, ASSISTANT.

CHARLES AIKEN, A. M.,

Professor of Vocal Music.

PHILIPPE FR. BALDAUFF,

Professor of German and French Languages.

CHARLES J. SHEPPARD,

Instructor in Book-keeping and Penmanship.

LOUIS SCHWEBEL,

Professor of Drawing and Painting.

MONS. J. TOSSO,

Professor of Instrumental Music.

The Seminary is situated on Seventh street, between Walnut and Vine, which is the most central and pleasant part of the city. The building is large and airy, having been built expressly for the purpose; and being out of the business part of the city, and surrounded with fine private residences, and shaded by beautiful

trees, it is quiet and retired, which makes it a very desirable location for an institution of learning.

During fourteen years a very fine Cabinet of Minerals and Shells has been collected for the Institution, to which additions are made every month.

A full set of Pelton's large Outline Maps has been purchased, which, together with a pair of large Globes, a Planetarium, Tellurian, Lunarian, and Geometrical Forms and Solids, Blocks, etc., increases very much the interest of the pupils in the study of Geography and Astronomy, and facilitates their progress.

In order to illustrate the subject of Physiology and Anatomy, and render it more interesting to the class, a full set of Cutter's Colored Anatomical Plates has been procured.

An Electrical Machine, Galvanic Battery, Air Pump, and all the Chemical and Philosophical Apparatus necessary to illustrate those subjects, by experiments and lectures, have been obtained.

A fine Melodeon has been purchased for the Institution, and is used by the Professor of Music in giving instruction to the classes in singing, and in our religious exercises in the morning. Number of pupils, 160.

Cincinnati English and Classical School, corner of Elm and Ninth streets. Andrew J. Rickoff, Principal. The design of this School is—1st. To prepare boys for College; 2d. To afford a generous Literary and Scientific course of Education to those whose parents do not intend to have them take a Collegiate course.

While the above objects will be kept steadily in view, the moral and physical training of pupils will receive constant and careful attention.

To this end, the school is liberally supplied with apparatus. As an illustration, one of the rooms is furnished with one of Barlow's large Planetariums.

Particular attention will be given to Spelling, Reading, Composition and Letter Writing.

The moral training of pupils is a matter of special care and attention. A teacher is with the pupils at the time of their exercises, not as a governor, but rather as a companion. This affords the very best opportunity to *train*, that is, to *habituate boys to the exercise of the virtues of the play-ground*, which develop into the virtues of social and business intercourse of the world. The vices of the school-ground have, of course, little opportunity for growth

while the teacher is present. Intellectual culture is aimed at, rather than the imparting of large treasures of information to the pupil. Habits of observation are cultivated, and a knowledge of things is held as desirable, rather than a knowledge of words, to which the memorizing process of the day are so apt to lead.

The physical training of the boys is amply provided for in a gymnasium, which is well furnished with apparatus.

Colleges.—There are in Cincinnati two Colleges, properly so called.

1. *The Cincinnati College.*—This is the oldest collegiate institution in the city, but its instructions have been, with the exception of its Law School, suspended for several years, and the building is now occupied mainly by the Chamber of Commerce, and Merchants' Exchange, and the Young Men's Mercantile Library Association.

LAW FACULTY.—

BELLAMY STORER, LL. D.,

Professor of Legal Rights, including Real Estate, Commercial Law and the Domestic Relations. Appointed in 1855.

HON. MYRON H. TILDEN,

Professor of Equity Jurisprudence, Pleading and Practice.

Appointed in 1850.

MASKELL E. CURWEN,

Prof. of Civil Remedies, including Pleading, Practice and Evidence.

Appointed in 1850.

This school has been in successful operation during the past twenty-two years, and now numbers ninety students. A certificate from this institution entitles the holder to admission to the bar in Ohio, without the usual examination. Students have access, for the purpose of reference, to several thousand law books, sufficient for all practical purposes, free of charge.

All communications relative to the business of the Law Department, should be addressed to M. E. Curwen, Times Buildings, 66 West Third street, Cincinnati, O. The Lecture Room is in the College Buildings, Walnut street, above Fourth, Cincinnati.

2. *St. Xavier's College*, Sycamore st., between Sixth and Seventh.

FACULTY.—

REV. M. OAKLEY, S. J., PRESIDENT.

REV. T. KUHLMAN, S. J., VICE PRESIDENT,

and Professor of Natural Philosophy.

REV. P. TSCHIEDER, S. J.,

Professor of German.

REV. P. ARNOUDT, S. J.,

Professor of Ancient Languages.

REV. A. LEVISSE, S. J.,

Professor of Modern Languages.

REV. M. LAWLOR, S. J., TREASURER.

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Professor of English Literature.

MR. WILLIAM SCHMIDT, S. J.,

Professor of Chemistry and Science.

MR. VENNEMANN, S. J., } *Assistant Professors in various branches.*
MR. B. COPPENS, S. J., }

This is an incorporated institution, belonging to the Roman Catholics, with extensive Library, Museum, and Philosophical and Chemical apparatus. It does not now, as heretofore, receive boarders.

Medical Colleges.—There are in Cincinnati six Medical Colleges, corresponding to four different kinds of Medical education. These are—1. The Medical College of Ohio; 2. Cincinnati College of Medicine and Surgery; 3. Eclectic Medical Institute; 4. Eclectic College of Medicine; 5. Physio-Medical College; 6. College of Dental Surgery.

The first and second of these are of the regular Old School in Medicine. The third and fourth represent the Eclectic School. The fifth is usually known as the Botanic Practice. The sixth is devoted to instruction in Dentistry. There are, probably, five hundred and fifty Medical Students attending Lectures in the city annually.

Medical College of Ohio.—FACULTY.

L. M. LAWSON, M. D.,

Professor of the Theory and Practice of Medicine, and Clinical Medicine.

JESSE P. JUDKINS, M. D.,

Professor of Anatomy.

GEORGE C. BLACKMAN, M. D.,

Professor of the Principles and Practice of Surgery, and Clinical Surgery.

GEORGE MENDENHALL, M. D.,

Professor of Obstetrics, Diseases of Women and Children, and Clinical Midwifery.

C. G. COMEGYS, M. D.,

Professor of Institutes of Medicine.

JAMES GRAHAM, M. D.,

Professor of Materia Medica and Therapeutics.

H. E. FOOTE, M. D.,

Professor of Chemistry and Toxicology.

THOMAS WOOD, M. D.,

Professor of Microscopical and Surgical Anatomy.

JOHN A. MURPHY, M. D.,

Adjunct Professor of Theory and Practice of Medicine, and Clinical Medicine.

B. F. RICHARDSON, M. D.,

Adjunct Professor of Obstetrics, Diseases of Women and Children, and Clinical Midwifery.

WILLIAM CLENDENIN, M. D.,

Demonstrator of Anatomy.

L. M. LAWSON, M. D., *Dean,*

159 Race street.

GEO. MENDENHALL, M. D.,

197 Fourth st., *Registrar.*

TRUSTEES.—

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JACOB STRADER, Esq.

WILLIAM S. RIDGELEY, M. D.

E. B. REEDER, Esq.

COLONEL G. W. HOLMES.

MILES GREENWOOD, Esq.

A. N. RIDDLE, Esq.

HON. THOMAS M. KEY.

The Faculty of the Medical College of Ohio do not deem it necessary to exhibit, in detail, the resources of the Institution, but merely to state that it is thoroughly organized, possesses ample means of illustration, and is prepared, therefore, to afford every facility for the acquisition of Medical and Surgical knowledge. The last session numbered 152 pupils, of whom 43 received the degree of Doctor of Medicine. This was the largest class assembled in the west during the past session.

The course of instruction is so arranged that each department will receive proper attention; the *elementary* branches will be fully taught in the didactic course at the College, and Clinical Medicine and Surgery receive ample illustration at the Hospital and City Dispensary.

The Commercial Hospital, the medical department of which is under the exclusive control of the Medical College of Ohio, furnishes almost every variety of medical and surgical cases; and these will be examined, prescribed for or operated on, DAILY, in presence of as many of the class as desire to attend, at an hour which will not interfere with the lectures at the College, while there will be, twice a week, as heretofore, regular Clinical Lectures and operations in the amphitheatre of the Hospital.

The advantages to be derived from this source must be apparent to any one. A great variety of diseases exists among the poorer classes of our population, whose circumstances debar them from entering the Hospital. These resort in large numbers, daily, to the Dispensary. It is believed that during the last year, more than two thousand of the afflicted resorted to it for relief.

Opportunities will also be presented for witnessing surgical operations and seeing cases at St. John's Hotel for Invalids by the students of the College, some of the professors of which are connected with that institution.

In view of these extended means of Clinical Instruction, it may be safely affirmed, that the Medical College of Ohio affords opportunities for acquiring information in regard to diagnosis, causes, nature and treatment of the diseases of the Mississippi valley, which cannot be excelled in any other College north or south.

The Anatomical and Surgical Cabinets are well supplied and conveniently arranged. They consist, in part, of the extensive collections of Prof. Cobb, and those of the late Prof. Shotwell. The private cabinet of Prof. Blackman, collected both in Europe and this country, and also that of Prof. Mendenhall, will be added to this department. This union of material will make a complete collection for the illustration of the Anatomical, Surgical and Obstetrical Lectures, and, with the Chemical apparatus of the Miami Medical College, the means are not less ample for a full course of experimental Chemistry.

The new College building, recently completed at an expense of over \$50,000, is not surpassed for elegance of structure and convenience of arrangement by any building of the kind in the United States. There are two large Lecture Halls, each capable of containing between five and six hundred persons, together with extensive apartments for museums, dissections, etc. The entire building is well lighted with gas, well ventilated, and thoroughly warmed, during the winter, by means of hot air furnaces.

Spacious and elegant rooms have been arranged for the Library. It consists of a large collection of the best medical authors, to which the students have access free of charge. It is open daily for obtaining and returning books. Students are advised, however, to provide themselves with the ordinary text-books, which they will require for constant reference.

Cincinnati College of Medicine and Surgery.—TRUSTEES.

JACOB GRAFF, ESQ.

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A. H. BAKER, M. D.

JACOB GRAFF, ESQ., *Pres't of Board.*REV. C. MOORE, *Secretary.*

FACULTY.—

A. H. BAKER, M. D.,

Prof. of the Principles and Practice of Surgery, and Clinical Surgery.

B. S. LAWSON, M. D.,

Prof. of Principles and Practice of Medicine, and Clinical Medicine.

P. M. CRUME, M. D.,

Professor of Obstetrics and Diseases of Women and Children.

R. SPENCER, M. D.,

Professor of Anatomy and Physiology.

T. W. GORDON, M. D.,

Professor of Chemistry and Pharmacy.

T. A. REAMY, M. D.,

Professor of Materia Medica and Therapeutics.

I. C. WALKER, M. D.,

Professor of Pathology and Physical Diagnosis.

J. C. BECK, M. D.,

Professor of Medical Jurisprudence.

J. W. BAKER, M. D.,

Adjunct Professor of Principles and Practice of Medicine.

WM. SPENCER, M. D.,

Adjunct Professor of Anatomy.

WM. H. SWANDER, M. D.,

Prosector to the Chair of Surgery.

The Faculty having investigated the subject thoroughly, and being fully satisfied that no single school could establish a standard of literary attainments, and a higher one of Medical Qualification, without great sacrifice, determined, one year ago, to commence the work by making the school *free*.

The College building is situated on the corner of Longworth st. and Western row, fronting one hundred feet on the former, by sixty on the latter. It is four stories high, well finished, presenting a plain but neat and tasteful exterior, and an internal structure admirably adapted to college purposes. The lecture-rooms are lofty, well lighted, freely ventilated, and capable of accommodating three hundred students. They are furnished with comfortable arm chairs, which are regarded as a decided improvement upon the old method of arranging seats.

For the prosecution of Practical Anatomy, the most liberal provisions have been made. The Dissecting Amphitheatre is placed upon the top of the main building, is well lighted and thoroughly ventilated.

The College Dispensary consists of acute and chronic diseases gathered from all parts of the city. Those who are able to visit the Dispensary, are prescribed for before the class. Those who are confined at home, may be visited and attended to by those of the class who are advanced in the study of their profession. By such a course young physicians start in their profession with experience in and familiarity with the treatment of disease.

The Commercial Hospital is open to the students of this College. Wednesday and Saturday mornings are devoted to the study of Clinical Medicine, under the Surgeon and Physician of that Institution. With such advantages as we have enumerated, it is evident that Clinical Medicine can be taught, and studied, as well in Cincinnati as in any city in America.

Eclectic Medical Institute.—Students, session 1857–8, 154; graduates of same, 70.

BOARD OF TRUSTEES.—

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L. E. JONES, M. D., <i>Professor of Materia Medica, Therapeutics and Medical Botany.</i>
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G. W. L. BICKLEY, M. D., <i>Professor of Physiology and Medical Jurisprudence.</i>
R. S. NEWTON, M. D., <i>Professor of Surgery and Surgical Practice.</i>
J. CAM MASSIE, M. D., <i>Professor of the Theory and Practice of Medicine, and Pathology.</i>
Z. FREEMAN, M. D., <i>Professor of General, Special and Pathological Anatomy.</i>

J. M. SCUDDER, M. D.,

Professor of Obstetrics, and the Diseases of Women and Children.

A. H. BALDRIDGE, M. D.,

Emeritus Professor of Obstetrics and Diseases of Women.

EDWIN FREEMAN, M. D.,

Demonstrator of Anatomy.

CLINIC LECTURERS.—

J. CAM MASSIE, M. D.,

R. S. NEWTON, M. D.,

Z. FREEMAN, M. D.

The Eclectic Medical Institute edifice is located on the corner of Court and Plum streets, in the very centre of the city. In location, Cincinnati presents advantages for a Medical School not possessed by any city in the Union. It is accessible from all points, very healthy, with a pleasant climate, and characteristic for its hospitality and attention to strangers. The building itself is large and commodious, well adapted to the purpose for which it is used, in good order, and well situated in every respect. Its Professors are men of acknowledged ability, by whose energy the Eclectic branch of the profession has been elevated to its present position. Its classes have always been the largest of any school west of the mountains, and its graduates have attained a marked success. No dissensions mar the harmony of its teachings, which are as thorough as those of any school in America, strictly scientific, and as liberal as it is possible to make a Medical College. It is now free from all those vagaries and fanciful speculations formerly taught, and the student is no longer taxed for outside or private-pay lectures; nor are females admitted to attend the lectures.

The school was chartered by the Legislature of Ohio, in 1845, and enjoys all the advantages and dignities ever conferred upon such institutions.

Clinical Medicine and Surgery are taught by the Professors occupying those chairs, two days in each week, at Newton's Clinical Institute, on the corner of Sixth and John streets, where every exertion is made to initiate the student into the actual bedside practice of medicine. Here are collected a variety of diseases from all parts of the country, and the lecturers endeavor to explain each case so fully that the student cannot fail to thoroughly understand its nature and mode of treatment. Many of the major operations of surgery take place in this establishment, where every student has an excellent opportunity of observing the mode of procedure in each case.

Every exertion has been made to render the Museum interesting and satisfactory, and additions are being constantly made. Private collections have been added, and arrangements have been made with gentlemen engaged in the pursuit of the natural sciences to secure valuable cabinets of specimens from all the departments of natural history. There is also an extensive *Materia Medica* cabinet.

The contributions of rare and valuable books made to the Library collection, have added greatly to its attractions. Plates, maps, drawings, etc., have been donated by friends, and arrangements have been made to supply the Library-room plentifully with papers from all parts of the country, and a general assortment of American and European Medical Journals.

Newton's Clinical Institute, 297 Sixth street, Cincinnati, O.— This is one of the most spacious and pleasant buildings in the city, furnished in the most modern style, with bells, gas, hot and cold water; with bath-rooms with cold and warm water. Persons while remaining here, can have every attention paid, in the rooms, or otherwise, that may be desired. The fine airy location, with the above advantages, cannot fail to render this one of the most desirable homes for the afflicted to be found in the country; and in large cities this is quite difficult to obtain. We feel assured, in making the above announcement, that the afflicted will duly appreciate the efforts which have been made to build up in this city one of the most extensive and convenient institutions for the benefit of the sick, that can be found in the United States; and all such as visit Cincinnati, to be treated by the proprietor, may rely upon every attention they may wish during their sickness. Here persons from home, and persons who wish to visit the city for medical purposes, and wish to be perfectly private, are provided for.

Many times persons wish to absent themselves for a few days or weeks, and remain where they can be entirely secluded from the cares of business and friends: all such can be fully accommodated in this particular.

Extensive experience warrants him in saying, that he knows that he can and will give satisfaction to all who may visit the Institution for medical advice or treatment. Here is a home, and at the same time a perfect private retreat for all who desire it.

He does not confine himself to the treatment of any exclusive disease, but will attend to any persons who call for medical aid.

Boarding price is from five to seven dollars a week. The medical charges will be governed by the extent of the operation, or the time necessary to effect a cure.

Patients arriving in the city will call at the Clinical Institute.

R. S. NEWTON, M. D.

The Eclectic College of Medicine, Cincinnati, O. Two sessions annually. Chartered in 1856.

OFFICERS.

WM. SHERWOOD, M. D., *President.*

C. H. CLEAVELAND, M. D., *Secretary.*

WM. A. ASHTON, M. D., *Treasurer.*

JOHN KING, M. D., *Dean of Faculty.*

FACULTY.—

J. F. JUDGE, M. D.,

Professor of Chemistry and Pharmacy.

T. E. ST. JOHN, M. D.,

Professor of Anatomy and Physiology.

A. JACKSON HOWE, M. D.,

Professor of Surgery.

C. H. CLEAVELAND, M. D.,

Professor of Materia Medica and Therapeutics.

WILLIAM SHERWOOD, M. D.,

Professor of Medical Practice and Pathology.

JOHN KING, M. D.,

Professor of Obstetrics and Diseases of Women and Children.

J. R. BUCHANAN, M. D.,

Emeritus Prof. of Cerebral Physiology and Institutes of Medicine.

The winter session commences about the middle of October, and continues sixteen weeks; the spring session early in February.

The College is located on Walnut, between Fourth and Fifth sts.

The course of instruction is as full and thorough as any Medical College can give in a session of sixteen weeks. Each of the six Professors gives a full course of Lectures in his department, and is assisted by all the requisite apparatus, specimens, drawings, etc. The Demonstrator affords those who dissect every facility for acquiring a full and minute knowledge of Anatomy. Students have the privilege, in common with those of other Colleges, of attending Clinical Lectures and witnessing Surgical operations twice a week in the Commercial Hospital. Clinical instructions are also given in the College by the Professors of Surgery and Medical Practice, whenever patients can be induced, by gratuitous treatment, to appear before the class. It is the constant effort of the Faculty to encourage independence of thought and practice on the part of their students.

The Physio-Medical College of Ohio, formerly known as the Botanico-Medical College, is the oldest of the institutions that teach the system of reformatory medicine. It was commenced at Columbus in 1836, and was the first of these schools that secured legal protection by a special charter from the State Legislature. It possesses a Library; Geological and Conchical cabinets; a valuable Herbarium; and the Anatomical, Chemical and Scientific facilities peculiar to Medical Colleges.

Its course of instruction embraces all the departments of medical science. The following medical gentlemen constitute the Faculty: D. B. Wiggins, D. McCarthy, Z. Hussey, W. H. Cook, S. E. Carey, T. W. Sparrow.

Its sessions are at present held in the building of the Cincinnati College; but its Directors are making arrangements to raise an edifice exclusively for the purposes of the institution. W. H. Cook, M. D., is Dean of its Faculty.

This College is very popular among medical reformers through the whole United States.

Ohio College of Dental Surgery.—This Institution was chartered by the Legislature of Ohio, January 21, 1845, and went into operation on the first Monday of November, 1846. It is under the supervision of the following Board of Trustees: B. P. Aydelott, M. D., President; Israel M. Dodge, M. D., Hon. Wm. Johnson, Robert Buchanan, Calvin Fletcher, Esqrs., and Dr. J. M. Brown, of Cincinnati; G. L. P. Hempstead, M. D., of Portsmouth; Sam'l Martin, M. D., of Xenia; and Dr. Hildreth, of Marietta.

The College building and lot are owned by an association of Dentists called the "Ohio Dental College Association," and cost about ten thousand dollars, and is the first and only building ever erected for the purpose of Dental education.

The new College building was opened the first Monday of November, 1854. The graduates of the school are exerting a beneficial influence on the profession at large, and the Institution may be regarded as a permanent affair.

The regular course of Lectures commences the first Monday of November of each year, and closes about the 20th of February. Tickets for the entire course cost \$105, including Matriculation; and the Diploma fee is \$30.

The present Faculty consists of—

C. B. CHAPMAN, M. D.,

Professor of Anatomy and Physiology.

J. B. SMITH, M. D.,

Professor of Pathology and Therapeutics.

JAMES TAYLOR, M. D., D. D. S.,

Professor of Institutes of Dental Science.

J. TAFT, D. D. S.,

Professor of Operatic Dentistry.

JOSEPH RICHARDSON, D. D. S.,

Professor of Mechanical Dentistry.

GEORGE WATT, M. D., D. D. S.,

Professor of Chemistry and Metallurgy.

HENRY A. SMITH, D. D. S.,

Demonstrator of Operatic and Mechanical Dentistry.

Bartlett's Commercial College, N. E. corner of Third and Walnut sts.—This is an institution in which, beyond all question, the most thorough and scientific mercantile education in the world can be obtained. There may be Mercantile Colleges in which the principles of book-keeping may be as thoroughly taught, so far as relates to the opening, posting and balancing of accounts; but Mr. Bartlett, after ten years of labor, unparalleled in this line, has completed a quarto volume which forms the basis of his commercial tuition, and the principles and details of which, when mastered by the scholar, qualify him to meet and dispose of any and every business problem which foreign or domestic commerce may render it his interest to solve. This volume—stereotyped—comprehends every description of Commercial and Banking tables, embracing time, simple interest, unexpired time and interest; interest, account current, time and average; compound interest, scientific discount, both simple and compound; annual income and annuity tables, equally adapted to the currencies of all commercial nations; the true or intrinsic value of the gold and silver coins and the standard weights and measures of all commercial countries. Also American, English, French and German exchange; together with the exchange of Brazil, and the importation of Rio coffee. Arranged with reference to the harmonizing of the accounts and exchanges of the world—the whole upon an original plan.

Here is not, as some persons might apprehend, a mere collection of tables or statistics, but the exhibition and development and illustration of a principle, novel and ingenious, which applies to all the periods, fractional or otherwise, of times, and to the currencies of the whole world.

VI. SOCIAL STATISTICS.

CHURCHES AND RELIGIOUS SOCIETIES.

Roman Catholic.—Cincinnati has, for the last thirty-seven years, been an Episcopate in this Church, and about eight years since it has been erected into an Archiepiscopal See—Most Rev. J. B. Purcell, D. D., the former Bishop, being constituted Archbishop of the diocese. His suffragans are Detroit, Cleveland, Louisville, Vincennes, Ft. Wayne, Sault St. Marie and Covington.

1. St. Peter's Cathedral, southwest corner of Plum and Eighth streets. Most Rev. J. B. Purcell, Very Revs. Edward Purcell and E. T. Collins, and Revs. David Whelan and Thos. J. J. Coppenger, officiating clergy.

2. St. Francis Xavier, west side of Sycamore, between Sixth and Seventh sts. Revs. Chas. Driscoll, S. J., Roman Roeloff, S. J., and James Converse, S. J., priests.

3. St. Augustine, Bank st. Revs. J. B. Hengehold and Bernard Menge, priests.

4. St. Patrick, northeast corner of Mill and Third streets. Rev. Richard Gilmour, priest.

5. St. Michael's, west side Millcreek. Rev. Michael Deselaers, priest.

6. Christ's Church, Fulton. Rev. Abraham MacMahon, priest.

7. Holy Trinity, south side Fifth, between Smith and Park sts. Revs. P. Krøger and J. H. Ridder, priests.

8. St. Paul's, southeast corner of Spring and Abigail sts. Very Rev. Joseph Ferneding and Rev. G. Uhling, priests.

9. St. Mary's, southeast corner of Jackson and Thirteenth sts. Revs. Clement Hammer and J. B. Elkmann, priests.

10. St. John Baptist, corner Bremen and Green sts. Revs. Otho Jair, Sigismund Koch, A. G'stier and Frs. Holder, priests.

11. St. Joseph, southeast corner of Linn and Laurel sts. Revs. Wm. Sommer and Inglebert Stehle, priests.

12. St. Philomena, north side Pearl, between Pike and Butler sts. Revs. G. H. Kuhr and John Tæbbe, priests.

13. St. Thomas, west side of Sycamore, between Fifth and Sixth streets. Rev. Dominic Senez, priest.
14. St. Willibrod, East side Walnut, south of Liberty st. Rev. Joseph Timan, priest.
15. Chapel Sisters of Charity, south side McFarland st., between Plum and Western row.
16. Chapel Sœurs Notre Dame, Sixth street, between Broadway and Sycamore.
17. Chapel Sisters of Mercy, corner Third and Lytle sts.
In these last the priests of the Cathedral and St. Francis Xavier officiate.
18. Franciscan Sisters of the Poor, Bank st., near Freeman.
19. St. Francis of Sales, at Walnut Hills. Rev. J. Schmidt, priest.
20. St. Aloysius, at Cumminsville. Rev. Joseph Wittler, priest.
21. St. James, at Whiteoak, on the Colerain road.
22. St. Mary of the Assumption, Mt. Pleasant. Rev. John C. Kraemer, priest.
23. Our Lady of Victories, Delhi. }
24. St. Peter, Lick run. } Rev. B. Bruning, priest.
25. *Protestant Episcopal*.—Christ Church, north side of Fourth st., between Sycamore and Broadway. Rev. K. Goddard, D. D., rector.
26. St. Paul's, south side Fourth, between Main and Walnut sts. Rev. P. H. Greenleaf, rector.
27. St. John, southeast corner Plum and Seventh sts. Rev. W. R. Nicholson, rector.
28. Trinity, corner Pendleton and Liberty sts. Rev. Richard Gray, rector.
29. Church of the Redemption, north side Clinton st., between Western row and John. Rev. Benjamin R. Maltby, rector.
30. Church of the Atonement, corner Richmond and Cutter st. Rev. Jas. A. M. Latourette, rector.
31. Calvary Church, Clifton. Rev. Wm. Lloyd, rector.
Right Rev. Charles P. McIlvaine, Bishop of the diocese of Ohio, resides at Clifton, one of the suburbs of Cincinnati.
32. *Presbyterian—Old School*.—Walnut Hills. Pastorship vacant.
33. First Church, north side Fourth, between Main and Walnut sts. Samuel R. Wilson, D. D., pastor.

34. Fourth Church, north side High street, near Fulton line. Pastorship vacant.
35. Fifth Church, southeast corner of Elm and Seventh streets. Rev. Samuel C. Logan, Pastor.
36. Seventh Church, west side Broadway, between Fourth and Fifth sts. Rev. Wm. M. Scott, pastor.
37. Central Church, northwest corner Barr and Mound streets. Rev. N. West, jr., pastor.
38. Ninth Church, south side Clinton st., between Cutter and Linn. Rev. James Black, pastor.
39. First Church, Glendale. Pastorship vacant.
40. First Church, Cumminsville. Rev. L. G. Gaines, pastor.
41. *Presbyterian—New School.*—Second Church, south side of Fourth, between Vine and Race sts. Pastorship vacant.
42. Third Church, southwest corner of Fourth and John sts. Rev. J. J. Blaisdell, pastor.
43. Eighth Church, north side of Seventh, below Linn and Baymiller. Rev. Daniel Rice, pastor.
44. Tabernacle Church, southwest corner Clark and John sts. Rev. D. D. Gregory, pastor.
45. German Church, Linn st. Rev. Wm. Winnis, pastor.
46. West End Mission Church, Poplar st., between Baymiller and Freeman. A missionary will be provided as soon as possible.
47. Fulton Church. Pastorship vacant.
48. Walnut Hills. Rev. Frank Robbins, pastor.
49. College Hill. Rev. W. H. Van Doren, pastor.
50. *Reformed Presbyterian.*—Church of the Covenanters, south side Ninth, between John and Mound. W. Wilson, D. D., pastor.
51. George Street Church, south side George st., between Race and Elm. Pastorship vacant.
52. Associate Reformed Church, south side Sixth st., between Race and Elm. Rev. G. D. Archibald, pastor.
53. Associate, northeast corner Cutter and Seventh sts. Rev. R. H. Pollock, pastor.
54. First Orthodox Congregationalist, north side of Seventh st., between Western row and John. Rev. R. S. Storrs, pastor.
55. Second Orthodox Congregationalist, east side Vine, between Eighth and Ninth sts. Rev. C. B. Boynton, pastor.
56. Welsh Congregationalist, west side of Lawrence, between Third and Fourth sts. Rev. Thos. Edwards, pastor.

57. *Baptist*.—First Church, north side Court, between Mound and Cutter. N. Colver, D. D., pastor.

58. Ninth Street Church, south side Ninth, between Vine and Race sts. Wm. Hansell, D. D., pastor.

59. High Street Church, east City Water Works Reservoir. Rev. Joseph Emory, pastor.

60. Freeman Street Church, Freeman st., near intersection of Fifth. Pastorship vacant.

61. Welsh Church, north side Harrison street. Rev. — Davis, pastor.

There is a society of German Baptists, under the pastoral charge of Rev. Bickel, worshipping at present at the corner of Pendleton and Liberty sts. They will shortly build a house of worship.

62. Baker Street—colored—Church, south side Baker, between Walnut and Vine streets. Rev. Henry L. Simpson, pastor.

63. Third Street—colored—Church, south side Third, between Race and Elm sts. Rev. Wallace Shelton, pastor.

64. *Disciples' Churches*.—Corner of Walnut and Eighth streets. Elder Thomas Munnell, pastor.

65. Church of the Messiah, north side Sixth, between Smith and Mound sts. Pastorship vacant.

66. Colored, north side of Harrison street. Elder W. Conrad, pastor.

67. Mission Church, west side of Freeman, north of Clark street. Elders Wm. P. Stratton, J. Poor, Thos. J. Melish, James Henshall, and Henry Hathaway, officiate.

Methodist Episcopal Churches.—East Cincinnati District, Rev. Wm. Herr, P. E. West Cincinnati District, Rev. David Reed, P. E. German, Rev. J. A. Klein, P. E.

68. Wesley Chapel, north side Fifth st., between Sycamore and Broadway. Rev. Asbury Lowrey, preacher.

69. Ninth Street, north side Ninth, between Race and Elm sts. Rev. Wm. H. Sutherland, preacher.

70. Asbury, south side Webster st., between Main and Sycamore. Revs. J. J. Thompson and Thomas Lee, preachers.

71. East Pearl, north side of Pearl st., between Lawrence and Pike. Rev. Thomas D. Crow, preacher.

72. New Street—colored—New st., east of Broadway. Rev. S. G. Griffin, preacher.

73. McKendree, Fulton. Rev. N. Callender, preacher.

74. Mt. Auburn and Collins. Rev. T. S. Cowden, preacher.
75. Walnut Hills. Rev. J. P. Waterhouse, preacher.
76. Morris Chapel, west side Western row, between Fourth and Fifth sts. Rev. C. W. Sears, preacher.
77. Christie Chapel, north side Catharine, between Mound and Cutter sts. Rev. J. L. Yourtee, preacher.
78. Park Street Chapel, southeast corner Park and Longworth sts. Rev. J. L. Chalfant, preacher.
79. York Street Chapel, southwest corner of York and Piatt sts. Rev. Wesley Rowe, preacher.
80. Findley Chapel, south side Clinton st., between Cutter and Linn. Rev. Moses Smith, preacher.
81. Raper Chapel, west side of Elm, above Findley st. Rev. J. Lambertson, preacher.
82. Cumminsville. J. Lambertson, preacher.
83. First M. E. Chapel, east side Race, between Thirteenth and Fourteenth sts. Wm. Ahrens, preacher.
84. Second M. E. Chapel, south side Everett, between Linn and John sts. Rev. George Danker, preacher.
85. Third M. E. Chapel, Buckeye, head of Main st. Rev. C. Wytttenbach, preacher.
- The last three are German Methodists.
- Right Rev. Thomas A. Morris, one of the Bishops of the M. E. Church, resides in Cincinnati.
86. Welsh Calvinistic Methodist, west side College street. Rev. Howell Powell, pastor. Dissents from the M. E. Church both in doctrine and discipline.
87. First Wesleyan Church, North street. Rev. R. Robinson, preacher. Anti-slavery.
88. Methodist—colored—Sixth st., east of Broadway. Rev. L. Gross, pastor. Independent.
89. *United Brethren in Christ*.—English. Southwest corner of Richmond and Mound sts. Rev. Wm. Shuey, preacher.
90. German, west side of Rittenhouse, north of Court st. Rev. Christopher Lonspaugh, preacher.
91. Cheviot Mission Church. Rev. Charles Schneider, preacher.
92. *Lutheran*.—United Evangelical, north side Sixth, between Walnut and Vine sts. Rev. Augustus Krœli, pastor.
93. United Evangelical, corner Thirteenth and Walnut streets. Rev. Nicholas Hofzimmer, pastor.

94. United Evangelical, corner Race and Fifteenth sts. Rev. G. W. Eisenlohr, pastor.

95. Lutheran, west side Walnut, between Eighth and Ninth sts. Rev. Carl Tuerck, pastor.

These are all Rationalist Churches.

96. Lutheran, east side Race st., between Fifteenth and Liberty. Rev. Adolph Kœnig, pastor.

97. United Evangelical Lutheran, east side Elm street, between Twelfth and Thirteenth. Rev. Maurice Raschig, pastor.

98. Evangelical Lutheran, west side Bremen, between Fifteenth and Liberty sts. Rev. R. E. Roos, pastor.

99. Evangelical Lutheran, east side Elm st., between Ninth and Court. Rev. Wm. H. Harrison, pastor.

The first of these is old Lutheran or High Church. The last holds its services in the English language.

100. *German Reformed*.—First, northwest corner of Elm and Fifteenth sts. Rev. Herman Rust, pastor.

101. Second, northeast corner of Franklin and Sycamore streets. Rev. Conrad Saure, pastor.

102. Third, south side of Findley, west of Baymiller st. Rev. Samuel Mease, pastor.

The last holds its services in the English language.

103. *Friends*, south side Fifth street, between Western row and John. Two congregations: one Orthodox, and one Hicksite; and two houses of worship, one brick, the other frame.

104. New Jerusalem, north side Longworth, between Race and Elm. Rev. Chauncy Giles, preacher.

105. *Unitarian*.—First Congregational Society, southwest corner Race and Fourth sts. Rev. M. D. Conway, minister.

106. First Christian Church, north side of Longworth, between Western row and John sts. Rev. James L. Scott, preacher. Independent.

107. *Universalist*.—First Society, east side of Plum st., between Fourth and Fifth. Rev. G. L. Flanders, preacher.

108. Second Society, southwest corner Sixth and Mound streets. Vacant.

Jews Synagogues, etc.—Holy Congregation, Children of Israel—Synagogue, corner Sixth and Broadway. Joseph Abraham, Parnas or President; Rev. Dr. Ch. Lilienthal, Rabbi Preacher. Founded in 1820.

Members and families residents, - - - -	1368
Members and families residing in the vicinity, -	150
Holy Congregation, Children of Jeshurun—Synagogue, Lodge st., between Fifth and Sixth. Henry Mack, Parnas; Rev. I. Wise, Rabbi Preacher. Founded in 1845.	
Members and families residents, - - - -	1260
Members and families residing in the vicinity, -	250
Holy Congregation in Brotherly Love—Synagogue, Race, between Fourteenth and Fifteenth sts. Joshua Hamberg, Parnas. Founded in 1847.	
Members and families residents, - - - -	810
Members and families residing in the vicinity, -	120
Holy Congregation, Gate of Heaven—corner Fifth and Race sts. Founded in 1850.	
Members and families residents, - - - -	480
Holy Congregation, Remnant of Israel—corner Seventh and Walnut sts. Philip Bamberger, Parnas. Founded in 1854.	
Members and families residents, - - - -	850
Members and families residing in the vicinity, -	75
Judah Touro Brethren. Founded in 1856. Joseph Trounstine, President.	
Members and families residents, - - - -	650
Two other congregations just organized. Members and families residents, about - - - -	
Strangers, not belonging to either of the congregations, residents of the city, about - - - -	400
Recapitulation—Residents in the city, - - - -	7318
.Residents in the vicinity, - - - -	595
Total, - - - -	<hr/> 7913

Sabbath Schools.—There are one hundred and six Sabbath Schools under the care of various religious denominations. In these schools thirteen thousand eight hundred and ninety children, most of whom attend regularly, receive religious instruction from nineteen hundred and eighteen teachers. This does not include the children of the Roman Catholics and Jews. Volumes in the library, forty thousand nine hundred and twenty.

DWELLING HOUSES AND STORES.

THE first recorded enumeration of the buildings of Cincinnati, was made in July, 1816, when they were found to number 1070: of stone, 20; of wood, 800; and of brick, 250. Of these, 660 were tenanted by families; 410 public buildings, shops, warehouses and offices, making up the residue.

In March, 1819, the dwellings and warehouses of the city were again numbered, and found to be—

Of brick and stone, one, two, three and four stories,.....	432
Of wood, one, two or more stories,.....	1458
	<hr/>
Total,.....	1890
Of these were dwelling houses,.....	1003
Shops, warehouses and public buildings,.....	887

The next enumeration of houses was made by Messrs. Drake and Mansfield, in 1826, toward the close of that year, when there were found 18 stone, 936 brick, and 1541 frame buildings. Of these, 650 were one story, 1682 two stories, and 163 three and four stories in height; making an aggregate of 2495 tenements, being all places of abode or business. In all these statements, every description of out-building is excluded, and no additions to houses previously erected are taken into account.

The following list, transcribed from official reports, furnishes the buildings of 1827 and 1828:

Brick, of one, two, three and four stories,.....	217
Frame, of one and two stories,.....	279
	<hr/>
	496

From this period the enumeration of buildings was taken annually, to 1850, with the following results:

1827 and 1828.....	496	1826.....	365	1844.....	735
1829.....	270	1837.....	305	1845.....	853
1830.....	205	1838.....	334	1846.....	980
1831.....	250	1839.....	394	1847.....	1140
1832.....	300	1840.....	406	1848.....	1305
1833.....	321	1841.....	462	1849.....	1454
1834.....	300	1842.....	537	1850.....	1418
1835.....	340	1843.....	621		
					<hr/>
Prior to 1827.....					13791
					<hr/>
Total buildings in 1850.....					2495
					<hr/>
					16286

Of these 9360 were of brick, 6886 were frames, and 40 were of stone.

The following table points out at a glance our progress, to this date, in buildings. Dwellings, shops, public buildings, warehouses and offices in—

1815.	1819.	1826.	1832.	1838.	1844.	1850.
1070	1890	2495	4016	5981	9136	16286

This statement shows that Cincinnati has been increasing, for the past forty-three years, at an average rate, which doubles its buildings every nine years. At the same time the erection, since 1850, of private dwellings and public buildings, in value, convenience and style of finish, and the warehouses in increased numbers of stories, as well as enlarged ground space, surpass their predecessors in a far greater ratio.

It is worthy of notice, also, that while, in 1815, the brick buildings were but 22 per cent. of the whole, they now form four-fifths or 80 per cent. of all the buildings in Cincinnati.

There is no city in the world, of equal or greater size to ours, in which so large a share of the community are property-holders.

VII. THE FINE ARTS.

EVERY intelligent and reflective tourist in foreign countries must have noticed, as significant and suggestive, the fact that the most lasting and honorable monuments of a people's greatness are those connected with the national art. Statesmen and their petty schemes of policy die together, and the consequences of victories are little more than a richer harvest or two, when the battle-fields are tilled again, and the desolated cottages rebuilt. Commerce, too, has its vicissitudes, but art is eternal. Even science and mechanics must yield to it, since the discoveries and improvements of one age obliterate by surpassing the results of a former one; but beauty is immutable while infinite, and the creations of a true artist endure to yield pleasure and instruction to successive generations. Every country in Europe affords examples of this, and frequently the musing traveler finds that States, once mighty in arms and commerce, now literally subsist on the capital of artists who once, per-

haps, starved in them. Venice, for instance, was, in her time, the richest and most potent republic in the world; yet take from her Titian and his great cotemporaries, and the art which decorates her churches and palaces, and the *Lido* would soon claim the fallen city. Rome was the mistress of empires, and now the only national evidences of her past glory are the mutilated remains of her architecture and sculpture; nor would the religion of the modern city prevent it becoming as much a desert as the Appian Way, had not the genius of Angelo and Raffael renewed its immortality, and made it more than ever the "Eternal City." Who would visit Parma were it not for Correggio, or stop a day at Perugia, were it not for Pietro, the master of Raffael? Governments in Europe recognize the truth of this, and the records of a grateful public are not wanting to substantiate it. In Germany, and indeed throughout the Continent, the towns are populous with statues of great artists; the chiefest attraction of the cities are the galleries of their works; streets are named after them, and the great living painters and sculptors are the companions of sovereigns, and are loaded with honors. In Italy it is forbidden to export any great picture of a grand master, and so intimately are they esteemed to be connected with the prosperity, as they are with the sympathies of the people, that an attempt to carry away any famous picture would cause a revolution or occasion a war.

These are not imaginary reflections, and it only needs to be shown how the great Napoleon recognized the fact to assure us of it. While he lived, he endeavored in every way to enrich his capital with these works of genius; and the sagacious policy of his nephew is exhibited in the same way, until Paris has become the wonder and delight of the world. The art of a country has thus become the type of its power, not less than its refinement, and political economists in this country would do well to learn that it is not alone in the encouragement of what are called, with an illiberal and false distinction, the *useful* as compared with the *fine* arts, that the prosperity of a nation is advanced.

Our limits will not permit us to pursue this subject further. Leaving it, we may turn with justifiable pride to the eminence that our young city, in spite of its remoteness from the great art schools of the world, has attained in both painting and sculpture. Without invidious comparisons, we may well feel proud of what we have accomplished. No other city of the Union, *ceteris paribus*,

has produced so many artists, reckoning among them, too, some of the brightest names in the art of the country.

As early as the year 1823, our infant city had its claims to æsthetical consideration. Of the artists, who painted here at that time, Joseph Kyle was the most eminent; and he, not an old man at present, enjoys a metropolitan reputation in New York, where he still has a studio. Following him, in 1826, was Sydney Lyon, a painter of some reputation, who had studied in Europe. His pictures were chiefly portraits.

From these early days the number of artists has continued to increase, until the saying has become as true as alliterative that has distinguished Cincinnati for pork and painting. Omitting the humbler aspirants, who have left little or no influence upon our art, we will content ourselves with a brief notice of those whose reputation is national.

1828. Minor K. Kellogg, a native of Cincinnati, who has painted some fine pictures, mostly illustrative of oriental life. He has resided for many years in Florence, Italy; and has now a studio in Paris.

1836. James H. Beard. This gentlemen came to the city when quite a youth, and has remained here ever since, steadily rising in reputation. His pictures are chiefly portraits, of which many have already a historical interest. He has tried, however, with considerable success, several other branches of art. "The Poor Relations," "The Emigrants," and "The Last Victim of the Deluge," are among the more important of his works.

1831. John Frankenstein; a portrait painter of considerable eminence, to whom our progress in art is much indebted; a faithful student of nature, his pictures will be valuable for the correct likenesses they almost invariably present. He has still a studio in the city, but has exchanged the pencil for the chisel, and has succeeded equally well as a portrait sculptor. Godfrey Frankenstein, his brother, commenced his career as an artist in 1840, and is a distinguished landscapist. George Frankenstein, a still younger member of this family of artists, is also a promising painter.

1833. William H. Powell, a student of Inman, has studied also in Rome and Paris, in which latter city he painted his picture of "De Soto Discovering the Mississippi," a picture in the rotunda at Washington, and, with the exception of Weir's painting, one of the



W. E. Smith



HISTORICAL & LANDSCAPE ENGRAVER
ON STEEL
PORTRAIT, HISTORICAL & LANDSCAPE ENGRAVER

and Printer, Plain and in Colors.

South East cor. of Smith & Main Sts.

CINCINNATI,

best of our national pictures. He has returned to this country, and is painting pictures which will increase his reputation; being engaged at present upon a historical work representing "Perry's Victory on Lake Erie,"—a commission from the State of Ohio, for which he is to receive five thousand dollars.

1838. T. Buchanan Reed; born in Chester county, Penn., in 1822, Cincinnati may also rank among her illustrious painters, since it was here that he commenced his artistic career. Like Washington Allston, Mr. Reed is famous both as a poet and painter; though, perhaps, no one has ever lived who has united these two branches of art with such excellence in both. We can only notice him here in his latter character. He was a mere child, when he attracted the notice of Clevenger, with whom he at first studied sculpture, giving promise of extraordinary capacity also in that field of art. The embryo poet-painter, however, was soon driven, partly by the impulse of his genius, and somewhat also, perhaps, by that necessity which so often attends the cradle of art, to portrait painting, in which he soon attracted attention. After painting with indifferent success, both in the eastern cities and in the west, he went, in 1850, to Italy, where he produced some more ambitious pictures. His poetical reputation having, by this time, been recognized in the most flattering terms, both at home and abroad, and his position as a painter rapidly rivaling it, he was induced, soon after his return to this country, to make a second voyage to Italy. The pictures painted during this visit, especially the "Lost Pleiad," and the "Undine," greatly enhanced his fame; but, unfortunately for his countrymen, the two pictures we have mentioned were both purchased in England. He came home only to revisit Europe a third time, whence he has again returned with new honors and still finer pictures; among which are "The Waterfall," "The Apotheosis of the Innocents," "Jephthah's Vow," and other sacred and poetical designs. Our limits forbid any details of criticism, but we may generally observe that in subjects of a historio-poetic character, such as require a delicacy of feeling and treatment, Reed has no rival in this country; while in portraits, especially of women, he is not less successful. His present studio is in New York.

1838. T. W. Whitridge, a landscape painter of great merit. His earlier pictures gave great promise. In 1849, he went to Europe, where he has since resided, at Dusseldorf, and more

recently in Rome. His pictures partake of the character of the German school, in which he studied, but bear the marks of an earnest and independent personal study of nature. He ranks among the first of our American landscape painters.

1841. Charles Soule; a portrait painter, who has painted some remarkably fine heads.

1842. William L. Sonntag; a landscape painter, who has followed the school of Cole, in which he has surpassed his master. His pictures are bold and imaginative, and exhibit a creative genius and ability, which, if chastened and moulded by a closer study of nature, would have raised him to the highest rank of his profession. He has been twice to Europe, without influencing his unfortunate style. His present studio is in New York.

1844. William Walcutt; portrait and historical painter. His studio has been, until recently, at Paris. His paintings are frequently fine.

1846. J. O. Eaton; one of the best of our resident portrait painters. His pictures are generally faithful as likenesses, and nearly always good as paintings.

1847. William Miller; a miniature painter of taste and ability. His studio is still in the city.

1853. John R. Tait; a native of Cincinnati. This young and talented landscape painter and poet, began his career as an artist in the studio of Sonntag, in his native city, in 1853. In the same year he accompanied Sonntag to Europe, and took up his residence in Florence. Here he enjoyed many advantages, not only from the study of the great masters, but from the loveliness of the surrounding scenery, which were immediately manifested in his pictures, and still more strongly in his poems. In 1855, after having visited northern Italy, he returned to our city, where he remained, pursuing his profession until the autumn of 1858, when he again turned his steps to Europe.

Sculptors.—Cincinnati may boast of three of the most distinguished sculptors of the Union, one of whom has probably a wider-spread reputation than any other living artist. With him our country's genius for this stately art was first recognized. Hiram Powers is a Vermonter by birth, but came to this city very early, and his first studio was here. His first works were in wax, and portraits and dramatic *tableaux* in this fragile material are still preserved in the Western Museum. Among his first marble busts,

was one of the late Judge Burnet, which is still considered inimitable. In 1836, he went to Europe, and settled in Florence, Italy, where he now resides. His works, exhibit no less versatility than genius. The most important of them are, "The Greek Slave," "Eve," "California," "America," "The Fisher Boy," "Il Penseroso," etc., and portrait statues of Washington and Webster. In addition to these, he has made many fine ideal and portrait busts.

Shubael Clevenger died, after the briefest fulfillment of a most brilliant promise. His artistic remains are nearly all portrait busts. Had he lived long enough for a complete development of his genius, he would have won the highest rank in his art.

Joel T. Hart, born in Lexington, Ky., also commenced his artist life in Cincinnati, in the studio of Clevenger. He went abroad, in 1849, to Florence, where he has since remained. He has scarcely a living rival in marble portraiture. He is engaged, at present, finishing a statue of Henry Clay for the State of Virginia.



William Wiswell, jr., long and favorably known here not only as a manufacturer of gilt mirror, portrait and picture frames, with mouldings in a variety of styles, and all richly ornamented and of the latest improved patterns, but as a liberal patron of the fine arts, has devoted the entire lower floor of No. 70 West Fourth st., to exhibition, free of charge to visitors, of one of the finest collections of works of art by masters in Europe and America, which surpass in excellence, number and variety many of the exhibitions in the Academies of the Fine Arts in our eastern cities. They consist of historical and fancy pieces, portraits, landscapes and other pictures. A description of these would be an entire catalogue. As specimens, it may suffice to refer to portraits of Webster, J. Q. Adams, Gen. Taylor, Gov. Chase, and others, by Beard, Soule, Eaton, etc., and landscapes by Whittridge, Sonntag, Kemper, etc., of Cincinnati celebrities; to Rothermel's "Landing of Cortez at Campobello and the burning of his vessels;" Bruckner's "Marriage of Pocahontas," and what is probably the *chef d'oeuvre* of the collection, Robbe's "Bull Broke Loose," pronounced by connoisseurs equal to the famous "Bull" of Paul Potter at the Hague.

This gallery is a favorite resort, of evenings especially, and frequented by visitors, principally strangers, as many as fifteen hundred of whom have visited it in one day and evening.

VIII. SCIENCE AND LITERATURE.

OBSERVATORY.

THE site on which the Cincinnati Observatory is erected, is one of great beauty. The building crowns a hill which rises some five hundred feet above the low water of the Ohio river, and commands a view of wonderful variety. On the east are seen in the distance the hills of Kentucky; the river coming in from the northeast; the towns of Fulton and Jamestown, with their manufactories and ship-yards: toward the north and northeast extends the same range of high grounds, on the most southern spur of which the Observatory is erected. The nearest of these are now highly cultivated, and are covered with luxuriant vineyards, and orchards of choice fruit. The village of Mt. Auburn presents an elegant appearance, especially when lighted by the first rays of the morning sun. Looking west from the summit of the Observatory, the entire city of Cincinnati is spread out before the beholder as upon a map. There is scarcely a building in the whole city which may not be distinguished from this elevated position. The river is followed by the eye toward the southwest, its continuity occasionally broken by the interposition of high hills: on the south and southwest are seen the Kentucky cities of Newport and Covington, separated by the Licking river, whose rich valley indents the country for more than twenty miles.

Such is the character of the position selected for the erection of the first great Astronomical Observatory ever erected by the *people*. Four acres were presented, on the summit of this hill, to the Astronomical Society, by N. Longworth. From so elevated a position, there is, of course, an uninterrupted horizon; so that the moment an object ascends above that line, it may be brought within the sweep of the telescope.

The Observatory building is constructed of stone, quarried from the hill, presents a front of eighty feet, and rises two stories and a half high on the wings, and three in the centre. The front is ornamented by a Grecian Doric portico.

Through the centre of the main building, and founded on the

natural rock, rises a pier of grouted masonry, eight feet square, entirely insulated from the floors through which it passes, to furnish a permanent and immovable basis for the great equatorial telescope, the chief instrument of the Observatory. This magnificent telescope, one of the largest and most perfect in the world, was made at the Fraunhofer Institute, Munich, by Messrs. Mertz & Mahler, so distinguished for the perfection of their optical instruments. The focal length is about seventeen and a half feet; the diameter of the object-glass, twelve inches; bearing magnifying powers varying from one hundred up to fourteen hundred times. Clock-work is attached to the ponderous mass of the telescope and all its machinery and circles, by which its mass, weighing some twenty-five hundred pounds, is moved with such admirable accuracy that an object under examination may be followed by the telescope at the will of the observer. This stupendous instrument, mounted on a stone pedestal of great strength and graceful figure, rises, when directed to the zenith, some twenty feet above the floor of the room in which it is located.

This room is surmounted by a roof of peculiar structure, and so arranged that a portion of the vertical wall and the roof, strongly framed together and mounted on wheels on a railway track, may, by a single person, be rolled either north or south, when the entire heavens fall within the sweep of the telescope. It is truly wonderful to behold the admirable manner in which this huge instrument is balanced and counterpoised, until the astronomer handles it with as much facility as if it were divested of gravity, or were afloat on some liquid surface.

One story lower, and in the transit-room, is mounted the transit telescope, the property of the United States Coast Survey, and furnished to the Observatory by the present Superintendent, Dr. A. D. Bache. Connected with this instrument is an admirable sidereal clock, by Molyneux, of London, and presented to the Observatory by Wilson McGrew, of our city. Here also is found the new machinery invented and constructed by the present Director of the Observatory, Prof. O. M. Mitchel: it consists of two instruments of entirely different construction, the one intended to record the observations of right ascension; the other, observations of difference in declination or of N. P. distance.

It would be quite impossible, in the compass of this notice, to give any just idea of this wonderfully delicate apparatus. By

means of the electro-magnet, the clock is made to record its own beats, with surprising beauty, on a disk revolving with uniform velocity on a vertical axis. This disk, covered with paper or metal, receives a minute dot, struck into it by a stylus, driven by a magnet, whose operating electric circuit is closed at each alternate beat by a delicate vibrating wire attached to the pendulum of the clock by an actual *spider's web*; thus, at each alternate vibration of the pendulum, the circuit is closed, and the second is entered, magnetically, on the revolving disk. At the close of each revolution, the disk moves itself forward about the tenth of an inch, without check or interference with the uniformity of its angular motion, and a new circumference of time dots commences to be recorded. On the time-scale thus perpetually forming, the observer can enter, magnetically, by the touch of a key, the observed instant of transit of any star or other object across the meridian wires of his telescope.

These entries are subsequently read from the disk, even down to the *thousandth of one second of time*.

This apparatus has now been in use for nearly ten years, and has furnished observations of accuracy never before reached by any previous instruments. The rapidity, facility, and accuracy attainable by these observations are truly admirable. Results have made it manifest that the errors, from all sources, were only to be found among the *hundredths* of one second of time. The inventor hopes to banish the errors from this region even, and drive them to the thousandth of a second.

The declination apparatus is also entirely new, and seems to possess astonishing power. It releases the observer from the necessity of reading any circles or other means of identifying his instrumental positions, and enables him, at a single transit, to record as many as *ten* observations for declination, even among the swiftly-moving bodies of the equator. This gives an advantage, all other things being equal, of ten to one over the old methods of observing. This instrument is yet incomplete in some of its refined details, but has produced remarkable results, and gives the highest promise, when mechanically complete in all its parts.

Such are the appliances for work in the Cincinnati Observatory. There is no endowment, and the present director has no salary or other compensation, and no assistance but what is paid for by himself. The great telescope has been principally employed in the

measure of the newly-discovered and previously-discovered double and multiple stars, and in figuring remarkable clusters and nebulae.

The other apparatus and transit instrument are employed in re-determining the places of the N. A. standard stars, and other kindred observations. It is only to be regretted that an enterprise, so nobly conceived, and so well carried out, could not now be permanently endowed, that its instruments might be worked day and night to their utmost capacity.

The Observatory is one, and not least among all, of those features of Cincinnati, which have given it character in Europe. The reputation of the director, Prof. Mitchel, is as high abroad as at home. His astronomical works have been reprinted in England, and find a place in scientific libraries there. His clock-registering invention has been adopted in trans-atlantic observatories, and his astronomical labors have been acknowledged as unsurpassed for industry and value by the distinguished savans of the age.



CINCINNATI HORTICULTURAL SOCIETY.

THIS flourishing and useful society, which originated in the active exertions of Robert Buchanan and a few others, of this city and vicinity, was formed in 1843, during the spring, summer and autumn of which year it held meetings nearly every Saturday, in the lower room, on Third street, between Walnut and Vine, formerly occupied as the postoffice. A correspondence was opened with distinguished horticulturalists in different parts of the Union. New fruits were thus brought to light, and seeds and scions of superior varieties were exchanged and disseminated. The exhibitions of flowers in the spring, and of fruits, vegetables and American wine in the autumn, were crowded with visitors, and a great impulse thus given to the culture of fruits and flowers.

From this humble beginning it has prospered beyond the anticipations of its most ardent friends, and now, in the sixteenth year, numbers eight hundred and sixty members. Its receipts for the past year were over three thousand dollars, and expenditures nearly the same; about twelve hundred dollars of which were paid out in premiums for fruits and flowers, and horticultural designs and decorations. It has a library numbering more than four hundred and fifty volumes.

That the society has been productive of much good, there can be no doubt; the great improvement in our fruit and flower market, which we notice every year, is the strongest evidence of its utility, while the growing taste for the beautiful and innocent pursuits of horticulture, gives delightful occupation to the leisure hours of many an amateur in our city and vicinity, affording, at the same time, an extensive and liberal market for the nurseryman and florist.

The semi-annual exhibitions of this society, particularly the autumnal, have been rich and varied, and highly creditable to our infant western institutions. Gentlemen from the east have acknowledged that our exhibitions compare favorably with the best of those across the mountains, and in many fruits even excel them.

The officers of the society for the present year are—S. W. Haseltine, President; Gen. M. S. Wade, George Graham, Wm. D. Bickham, Vice Presidents; E. J. Hooper, Recording Secretary; F. G. Cary, Corresponding Secretary; William Stoms, Treasurer.

Y. M. M. L. ASSOCIATION.

Organized April 18, 1835, with forty-nine members; increased to four hundred and seventy-two by April, 1841; to sixteen hundred and fifty-three by January, 1851, and now numbering three thousand and seventy members.

The increase of the library has kept pace with that of the membership. It commenced with seven hundred and sixty-seven volumes, which number enlarged to fourteen hundred and six in 1841, to eleven thousand and ninety-six in 1851, and to nineteen thousand two hundred and fifty-nine in 1859. The library now comprehends a wide range of standard works in the various departments of literature, science and art, and a copious selection from current publications of all that is interesting and instructive. Forty-five thousand volumes are put into circulation annually. The reading-rooms constitute one of the most attractive features of this institution. Here are regularly received one hundred and twenty daily and one hundred and eleven weekly newspapers, and literary and scientific journals; eighty-six monthly, thirty-seven quarterly, three bi-monthly, and two semi-monthly magazines.

The extensive and valuable cabinet of Natural History, formerly belonging to Prof. Christy, has recently become the property of this

Association. It embraces of land and marine, fresh water and western shells, six thousand eight hundred and eighty-four specimens Also, forty-eight cases of minerals and fossils.

The library and reading-rooms are much frequented by strangers, of which there are always in Cincinnati great numbers. They are well calculated to give a favorable impression of the public spirit of the mercantile community here.

The Association occupies a fine suite of rooms in the Cincinnati College building, on Walnut st., above Fourth.

The officers are, Chas. W. Rowland, President; Theodore Cook, Vice President; M. T. Williamson, Corresponding Secretary; Jno. L. Talbott, Recording Secretary; Frank H. Baldwin, Treasurer; Benjamin Evans, S. G. Hubbard, Thomas W. Howell, Thomas A. Colter, John A. Townley, Directors; R. H. Stephenson, Librarian.

OHIO MECHANICS' INSTITUTE.*

THIS spacious and well proportioned edifice is at the intersection of Sixth and Vine sts., and owes its construction to the public spirit of Miles Greenwood and a few other whole-souled mechanics, who have contributed liberally of their time, personal labors, and pecuniary aid, to establish this highly creditable temple to the mechanic arts. Within its walls the various Mechanics' fairs are annually held. Scientific knowledge is taught here by lectures, illustrated by extensive philosophical and electrical apparatus, and mineralogical cabinet; and impressed on the minds of the members by the use of a copious and valuable library of more than ten thousand volumes; and reading-room periodicals of more than eighty first-class literary, scientific and philosophical journals of the present day.

There are nine hundred and fifty members—six hundred of whom use the library. Of these last more than three hundred are minors.

Courses of lectures, weekly, have been held hitherto throughout the winter months. These will be, hereafter, extended to three lectures in each week during that season. An evening school of

* Incorporated in 1829.

art and design, with five teachers and one hundred and forty-two pupils, is part of this scheme of progress.

The edifice is four stories high, and Gothic in its style. Dimensions, ninety feet on Vine st., by seventy-five on Sixth; main entrance on Sixth. The walls are of brick, eighty-five feet high from the ground-floor to the top of cornice. The door and window sills are of cast iron, as are also the columns supporting the fronts. The exterior walls are finished with stucco imitation of stone, in the most durable manner. The entire height to the top of the roof is one hundred feet; in the centre of which is a cupola or lookout; and, as the building is situated on the most elevated point of land between the canal and river, from it is afforded one of the finest views of the city, Covington and Newport, to be had anywhere else, except from the hills themselves.

The interior arrangements are also very complete. The lower part, on Vine and Sixth, is occupied as stores and offices; the second story, as a library, reading and class-rooms, exclusively by the Institute, and the third story contains a lecture-room and museum, of considerable extent, with convenient ante-rooms attached. The fourth story, halls for the I. O. of O. F.

The building is warmed with hot air, and lighted with gas.

Officers—Chas. F. Wilstach, President; E. M. Shield, V. President; John F. Wiltsee, Recording Secretary; Caleb C. Whitson, Corresponding Secretary; H. W. Stephenson, Treasurer; John B. Heich, Clerk.

PERIODICALS.

1. CINCINNATI Gazette and Liberty Hall—Jos. Glenn, Richard Smith, Edmund Babb, E. T. Kidd and Wm. H. Johnston, proprietors and publishers. Babb and Smith, editors.

2. Enquirer—Faran & McLean, proprietors and publishers. James J. Faran, editor.

3. Times—C. W. Starbuck, publisher and proprietor. J. W. Ward and E. M. Spencer, editors.

4. Commercial—M. D. Potter & Co., proprietors. M. D. Potter, editor.

5. Volksblatt—Stephen Molitor, proprietor and publisher. Em. Klauprech, editor.

6. Volksfreund—J. A. Hemann, publisher and editor.

7. Republikaner—W. E. Becht, proprietor and publisher. Aug. Willich, editor.

These are dailies, in folios, with weekly re-issues, devoted to politics and the publication of current events. Three of the above, as their titles indicate, are in the German language.

8. Penny Press—C. F. Hall, publisher and proprietor. News.

9. Law and Bank Bulletin—A record of legal and financial news and events. W. W. Warden, publisher.

Of the weeklies, properly so called, are the—

10. Western Christian Advocate—C. Kingsley, D. D., editor. Revs. Swormstedt & Poe, publishers. Methodist Episcopal.

11. Presbyter—Revs. J. G. Monfort and J. M. Wampler, editors, publishers and proprietors. Old School Presbyterian.

12. Central Christian Herald—Rev. Clem. E. Babb, editor, publisher and proprietor. New School Presbyterian.

13. Journal and Messenger—Central Baptist Press Co. Regular Baptist.

14. American Christian Review—Elder Benj. Franklin, editor and publisher. Disciples Church.

15. Western Episcopalian—Rev. Norman Badger, editor, publisher and proprietor. Protestant Episcopal.

16. Star of the West—Henry R. Nye and G. L. Demarest, editors and publishers. Universalist.

17. New Church Herald—Rev. Sabin Hough, editor. New Jerusalem Church.

18. Catholic Telegraph—Very Rev. E. Purcell and S. H. Rosencrans, editors. J. P. Walsh, proprietor. Roman Catholic.

These are the organs of their respective denominations. All folios, except the last.

19. Christian Leader—Rev. Wm. Perkins. Anti-slavery.

20. Sunday School Journal—Disciples Church.

There are four weeklies published in German.

21. Wahrheits freund—F. X. Brandecker, editor. J. A. Hermann, publisher. Roman Catholic.

22. Christliche Apologete—Rev. William Nast, editor. Revs. Swormstedt & Poe, publishers. Methodist.

23. Protestantische Zeitblätter—Revs. A. Krøell and G. W. Eisenlohr, editors. Rationalist.

24. Hochwächter—Aug. Becker, editor and publisher. Socialist and Infidel.

The first and third of these are quarto; the other two folio.

There are also of weekly issues—

25. Scientific Artisan—Geo. W. L. Bickley, editor. American Patent Company, proprietors. Devoted to the mechanic arts and patent operations. Quarto.

26. Journal—A repository of the Arts and Sciences. Weekly. Wm. H. Cook, editor and publisher.

27. Sunday Dispatch—W. S. Adams, editor and publisher. Miscellany.

28. Railroad Record—Mansfield and Wrightson, publishers and editors. Railway intelligence.

29. Prices Current—Wm. Smith, editor and proprietor. Commercial.

30. Helvetia—A miscellany, in German, for the Swiss, as its name imports. Walser & Schellenbaum, proprietors. J. G. Walser, editor.

31. Israelite and Deborah—Two periodicals, devoted to Jewish interests; the latter in German. I. M. Wise, D. D., and Dr. M. Lilienthal, editors. E. Bloch & Co., proprietors.

Semi-monthlies as follows:

32. Type of the Times—Longley Bros., publishers. Phonetic.

33. Presbyterian Witness—Rev. R. H. Pollock, editor. Associate Church organ.

34. Sunday School Advocate—Methodist.

35. Lord's Detector—Johnson Brothers & Co., editors and publishers.

36. U. S. Bank Mirror—W. R. Paddock & Co., editors.

37. White's Financial and Commercial Reporter and Counterfeit Detector—Published simultaneously at New York, Cincinnati, Louisville and St. Louis, on the 1st and 15th days of every month. It contains quadruple monetary articles and quadruple quotations, and is therefore equal to four ordinary reporters. The rates of discount are furnished by a banking firm in each of the four cities, who pledge themselves to purchase all bank notes at the rates quoted by the Reporter for their respective localities. The Describer of Genuine Bank Notes contains an accurate description of every genuine bank note in the United States and Canada. The Reporter describes the counterfeits and the Describer the genuine notes. Office, College buildings, Walnut st.

38. Bepler's Bank Note List—A monthly German Detector.

The last four report on the banks, currency, etc.

The monthlies, all except one, octavo and duodecimo, are—

39. Ladies' Repository—Literary and religious.
 40. Masonic Review—C. Moore, editor and proprietor.
 41. Odd Fellows Casket and Review—Longley Bros., publishers.
 42. Lancet and Observer—Drs. Mendenhall, Murphy and Stevens, editors.
 43. Cincinnati Medical News—Dr. A. H. Baker, editor. Folio.
 44. Cincinnati Eclectic and Edinburgh Medical Journal—Drs. R. S. Newton and G. W. L. Bickley, editors.
 45. College Journal of Medical Science—Edited by the Faculty of the Eclectic College of Medicine.
 46. Physio-Medical Recorder—Dr. W. H. Cook, editor and publisher.
- The first two are organs of the regular Old School practice; the second two of the Eclectic, and the last of what is usually termed the Botanic School.
47. Sonntag Schule Glocke—Swormstedt & Poe, publishers.
 48. Young Peoples' Monthly—Martha M. Thomas, editor. J. K. Alpaugh, publisher. Literary.
 49. Youths' Friend—For Sabbath Schools. Universalist.
 50. Sunbeam—For Juveniles. New Jerusalem Church.
 51. The Dental Register of the West—J. Taft and Geo. Watt, editors. J. Taft, proprietor.
 52. Ordo Divini—Church Annual. Roman Catholic. J. P. Walsh, publisher.
 53. Directory—Annual royal octavo. C. S. Williams, proprietor and editor.

IX. M O N E T A R Y .

FIRE, MARINE, AND LIFE INSURANCE COMPANIES.

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L O C A L .

CINCINNATI EQUITABLE INSURANCE COMPANY.—Incorporated 1827.

*Office, Third street, east of Vinc.*

Griffin Taylor, President; Joseph K. Smith, Secretary and Treasurer.

Directors—Griffin Taylor, D. K. Cady, R. R. Springer, John A. Simpson, Charles Andress, George Carlisle, Joseph Jones, B. Matlack, S. S. Smith, John Whetstone, J. W. Canfield, Mark E. Reeves

CINCINNATI INSURANCE COMPANY.—Established in 1829.

*Office, No. 4 Front Street.—Capital, \$150,000.*

Insure against loss and damage by fire. Also, perils of the sea and inland navigation.

John W. Hartwell, President; G. W. Williams, Secretary.

Directors — John W. Hartwell, Allen Collier, Chas. W. Rowland, G. S. Williams, James Lupton, D. T. Woodrow, J. W. Canfield, Jno. W. Dudley, R. M. W. Taylor, Bowman C. Baker, James A. Frazer, Wm. Resor, Jno. W. Ellis, H. M'Birney, A. S. Winslow.

FIREMEN'S INSURANCE COMPANY.—Incorporated 1832.

*Office, in Company's building, on northeast corner Main and Front streets, second story, entrance on Front.*

Policies—fire and marine—upon liberal terms.

Henry E. Spencer, President; L. Clason, Secretary.

Directors — Edmund Dexter, James Calhoun, Chas. W. West, John D. Minor, Peter A. White, J. S. Chenoweth, Pollock Wilson, N. W. Thomas, John Whetstone, J. T. Warren, John P. Tweed, Robert Andrews, Briggs Swift, Sam. J. Hale, Geo. Wilshire.

WASHINGTON INSURANCE COMPANY.—Chartered in 1836.

*Office, No. 41 Main street.*

Capital, \$135,000, all paid and security invested—Assets, Dec. 1, 1858, \$169,000.

Wm. Goodman, President; John P. Whiteman, Secretary.

Directors—Wm. Goodman, Wm. Hooper, S. C. Parkhurst, Gardner Phipps, Lowell Fletcher, I. W. Sibley, Oliver Perin, Geo. T. Stedman, Henry Hanna, Joseph Torrence, C. Taylor Jones, Joseph H. Wilby, Wm. H. Woods, Charles R. Fosdick, Joseph C. Butler, John Swasey, Thompson Dean, Benjamin Eggleston, A. D. Bullock, B. F. Brunnau.

MERCHANTS AND MANUFACTURERS' INSURANCE COMPANY.

Capital, \$150,000.

*Office, No. 11 E. Front st., between Main and Sycamore, up stairs.*

A. M. Searles, President; B. B. Whiteman, Secretary.

Directors—A. M. Searles, Robert Hosea, Geo. Dominick, Robt. Brown, Richard W. Keys, Thos. Emery, Wm. Henry Davis, A. H. Andrews, Geo. Hatfield, S. H. Burton, M. E. Reeves, M. Werk, John A. Dugan, Fd. Goulé, Wm. Procter.

CITY INSURANCE COMPANY—Fire and Marine.

*Office, No. 8 Front street, between Main and Sycamore.*

E. S. Haines, President; N. Gregory, Secretary; Wm. P. Stratton, Surveyor.

Directors—George Carlisle, James P. Kilbreth, R. M. Bishop, T. J. Weaver, W. B. Moores, J. W. Donohue, E. S. Haines, A. D. E. Tweed, J. D. Lehmer.

CITIZENS' INSURANCE COMPANY—Fire and Marine.

Capital, \$200,000.

*Office, No. 3 west Third street—Trust Company building.*

Isaac C. Copelen, President; Geo. W. Copelen, Secretary.

Directors—Wm. Wood, Jas. F. Cunningham, Andrew Erkenbrecher, Isaac C. Copelen, Sydney S. Clark, Joseph Reakirt, and George R. Dixon.

COMMERCIAL INSURANCE COMPANY—Capital Stock, \$100,000.

*Office, northwest corner of Main and Front streets.*

M. L. Harbeson, President ; J. A. Townley, Secretary.

Directors—I. B. Carpenter, John P. Trumbower, R. Macready, L. G. E. Stone, G. H. Davis, Jno. A. Skiff, Isaac Bruce, Caleb Clark, Fred. F. Brooks, Martin Bare, Geo. D. Winchell, David Hawley.

This Company has no Agencies, and is prepared to take Fire, Marine, and Inland Navigation Risks at favorable rates of premium.

WESTERN INSURANCE COMPANY—Capital, \$100,000.

*Office, in second story, No. 2 Front street, between Main and Sycamore.*

This Company is taking Fire, Inland, and Marine Risks at current rates of premium. Losses fairly adjusted and promptly paid.

Thos. F. Eckert, President ; Stephen Morse, Secretary.

Directors — Thos. F. Eckert, J. W. Gosling, S. W. Pomeroy, Wm. Glenn, Robt. Mitchell, Seth Evans, J. H. Taaffe, George Stall, H. Clearwater, W. H. Comstock, David Gibson, Henry Brachmann, Flamen Ball, Robert Buchanan, W. E. Marsh, Thos. R. Elliott, W. C. Mann, C. G. Shaw, Jno. G. Isham, Wm. Sellew.

BUCKEYE STATE FIRE AND MARINE INSURANCE COMPANY.

Capital, \$100,000.

*Office, No. 16 Public Landing, between Main and Sycamore streets, up stairs, Cincinnati, O.*

W. P. Hulbert, President.

A. A. Lawrence, Secretary ; W. H. S. Ewell, Surveyor.

Trustees and Directors — W. P. Hulbert, David Gibson, A. McAlpin, H. O. Gilbert, A. A. Marsh, Jno. B. Gibson, Jno. Swasey, S. S. Davis, I. W. Parker, Jno. W. Gosling, Henry F. Handy, E. D. Crookshank, Chas. Reakirt, Henry Davis.

Stockholders — Wm. P. Hulbert, Geo. K. Shoenberger, John Bates, David Gibson, McAlpin, Hinman & Co., A. H. Smith, Geo. R. Dixon & Co., Lewis & Wilson, W. A. Webb, J. J. Rickey, E. W. Tuttle, John Taylor & Co., S. S. Davis, M. F. Crigler, William Bellows, E. D. Crookshank, G. Henshaw, James C. Hall, Henry Kessler, Alex. McCabe, Jno. W. Gosling, J. & C. Reakirt, William



Bromwell, H. O. Gilbert, Wm. Gibson, D. H. Mears, Henry F. Handy, A. A. Marsh, W. R. Morris, Henry Poor, G. Henry Davis, Jno. Swasey & Co., E. T. Carson, Jno. B. Gibson, Palmer & Owen, William Dunn.

Eagle Insurance Company; National Insurance Company; Central Insurance Company; Ohio Life Insurance Company; Queen City Insurance Company; and Home Insurance Company.

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### FOREIGN AGENCIES.

LIVERPOOL AND LONDON FIRE AND LIFE INSURANCE COMPANY.

Capital, \$10,000,000—By State authority.

*29 Third street, second story, south side, bet. Main and Walnut,  
Cincinnati, O.*

Howard Matthews, Agent.

Losses promptly and equitably adjusted at this Agency.

FRANKLIN FIRE INSURANCE COMPANY, of Philadelphia.

Incorporated in 1829—Charter perpetual.

*Office, in Times building, No. 64 Third, between Walnut and Vine,  
streets, Cincinnati, O.*

Cash capital, all paid in, - - - - \$ 400,000 00.

Invested Fund and Cash on hand - - - - 1,923,541 06.

Charles N. Bancker, President; Edward Dale, Vice President,  
William A. Steel, Secretary.

Directors—Charles N. Bancker, Tobias Wagner, Samuel Grant,  
David S. Brown, Edward C. Dale, Jacob R. Smith, George W.  
Richards, Mordecai D. Lewis, Isaac Lea, George Fales.

Since the incorporation of this Company, a period of twenty-nine years, they have paid over Four Million dollars—losses by fire—thereby affording undoubted evidence of the advantages of Insurance, as well as their ability and disposition to meet with promptness and dispatch all liabilities.

The undersigned, representing in this city the above well known and responsible Insurance Company, are prepared to insure every

description of property, in town or country, at rates as low as are consistent with security.

All Losses promptly adjusted and paid at this Agency.

John Reeves, Agent—John W. Morgan, Secretary.

SPRINGFIELD FIRE AND MARINE INSURANCE COMPANY, of Springfield, Massachusetts.

*Office, in Times building, No. 64 Third, between Walnut and Vine streets, Cincinnati, O.*

|                                    |                |
|------------------------------------|----------------|
| Cash capital, all paid in, - - - - | \$ 150,000 00. |
| Assets, - - - - -                  | 379,293 61.    |
| Liabilities, - - - - -             | 13,562 50.     |

Edmund Freeman, President; William Conner, Jun., Secretary.

Directors—Edmund Freeman, Chester W. Chapin, Willis Phelps, Andrew Huntington, Jacob B. Merrick, Marvin Chapin, Albert Morgan, Daniel L. Harris, Waitstill Hastings, Edward Southworth, William Birnie, Samuel S. Day, Charles Merriam, George Walker, Lombard Dale.

Insures dwellings, stores, manufactories, and other buildings, goods, wares, merchandise, household furniture, machinery, and other property, against loss or damage by Fire.

The above Company having complied with the law of Ohio, we are prepared to issue Policies on favorable terms, and solicit a share of patronage.

All Losses promptly adjusted and paid at this Agency.

John Reeves, Agent; John W. Morgan, Secretary.

ROYAL FIRE AND LIFE INSURANCE COMPANY, of Liverpool and London.

*Office, No. 62, first floor, Times building, Third, between Walnut and Vine streets, Cincinnati, O.*

Capital, Two Million pounds sterling, or ten million dollars.

Investments in the U. States, Three hundred thousand dollars.

John S. Law, Agent; John H. Law, Secretary.

Takes Fire risks in Cincinnati, O., and vicinity. Takes also Life risks, with liberal privileges. No Marine risks taken.

Full power delegated to the Agent to settle all claims, so soon as ascertained, without reference to Liverpool or elsewhere, with promptness and liberality.

John H. Law, Agent,

*Office, Times building, No. 62 west Third street, Cincinnati, O,*

Represents the following sound and reliable Companies:

STATE FIRE INSURANCE COMPANY, of New Haven.

Capital, \$200,000,

COMMONWEALTH INSURANCE COMPANY, of Philadelphia,

Capital, \$500,000.

Insurance effected in City and Country, on dwellings, furniture, merchandise, manufactories, founderies, machinery, lumber, and other property.

The above Companies have complied fully with the Ohio laws regulating foreign Companies. All Losses promptly and liberally adjusted and paid at this Agency.

MUTUAL BENEFIT LIFE INSURANCE COMPANY, Newark, New Jersey.

*At Office, Cincinnati Ins. Co., No. 4 east Front street.*

Charter perpetual—Profits are divided among the Assured.

Net accumulation, Jan. 1, 1858, - - \$ 2,743,325 73.

Since its commencement—April, 1845—this Company has paid in Losses, \$1,704,349 55; nearly \$100,000 of this to widows, orphans, and creditors of deceased persons in this city and vicinity, under policies issued through this Agency, and has returned to the insured in dividends, \$1,006,598 71.

For particulars, or any information on the subject, apply to

John W. Hartwell, Agent for Co.

Wolcott Richards, M. D., Medical examiner.

Samuel E. Mack & Co., Agents.

*Office, 35 West Third street.*

HOME INSURANCE COMPANY, of New York.

Capital, \$600,000.

WESTERN MASSACHUSETTS INSURANCE COMPANY, of Pittsfield, Mass.

Capital, \$150,000.

METROPOLITAN FIRE INSURANCE COMPANY, of New York.

Capital, \$300,000.

FIREMEN'S INSURANCE COMPANY, of Charleston, S. C.

Capital, \$200,000.

CONTINENTAL INSURANCE COMPANY, of New York.  
Capital, \$500,000.

NIAGARA FIRE INSURANCE COMPANY, of New York.  
Capital, \$200,000.

NORTH AMERICAN FIRE INSURANCE COMPANY, of New York.  
Capital, \$250,000.

HUMBOLDT FIRE INSURANCE COMPANY, of New York.  
Capital, \$200,000.

MERCHANTS' INSURANCE COMPANY, of Hartford, Conn.  
Capital, \$200,000.

NEW YORK LIFE INSURANCE COMPANY, of New York.  
Assets, \$1,524,120 08.

CHARTER OAK LIFE INSURANCE COMPANY, of Hartford, Conn.  
Assets, \$540,258 47.

Refer, by permission, to—W. W. Scarborough, Esq., Miles Greenwood, Esq., Messrs. Gilmore & Brotherton, S. Davis, Jun. & Co., Springer & Whiteman, Hunnewell, Hill & Co., Tweed & Sibley, Day & Matlack, Rawson, Wilby & Co., W. B. Smith & Co., Suire, Eckstein & Co., George T. Stedman, Esq., A. Mitchell Hall, Esq., Tyler Davidson & Co.

Taylor & Anthony, General Insurance Agents.

*Office, No. 76 West Third street, Cincinnati, O.*

Fire, Marine, and Life Policies, issued on the most favorable Terms, by the following Companies:

PROVIDENCE WASHINGTON INSURANCE COMPANY, Providence.

MERCHANTS' INSURANCE COMPANY, Philadelphia.

LAMAR FIRE INSURANCE COMPANY, New York.

PHENIX FIRE INSURANCE COMPANY, New York.

ROGER WILLIAMS INSURANCE COMPANY, Providence.

WASHINGTON INSURANCE COMPANY, New York.

ARCTIC FIRE INSURANCE COMPANY, New York.

INDEMNITY FIRE INSURANCE COMPANY, New York.

LORILLARD FIRE INSURANCE COMPANY, New York.

GOODHUE FIRE INSURANCE COMPANY, New York.



ATLANTIC FIRE INSURANCE COMPANY, New York.

RESOLUTE FIRE INSURANCE COMPANY, New York.

MANHATTAN LIFE INSURANCE COMPANY, New York.

Refer, by permission, to—S. Fosdick, Esq., W. W. Scarborough, Esq., Messrs. N. W. Thomas & Co., Joseph Rawson & Co., S. Davis, Jun. & Co., Roots & Coe, A. G. Cheever & Co., R. Hosea & Co., Macy, Rankin & Co., Day & Matlack, Wynne, Haynes & Co., Shaw, Buell & Barbour, Hunnewell, Hill & Co., George C. King & Co.

WASHINGTON UNION INSURANCE COMPANY, of Cleveland, O.

*Office, No. 3 west Third street, Trust Co. building.*

Capital, \$300,000.

CLEVELAND M. INSURANCE COMPANY, of Cleveland, O.

Capital, \$150,000.

I am prepared to insure all descriptions of Property; also, to take risks on Hulls and Cargoes of Steamboats, on as favorable Terms as any other responsible Insurance companies.

George W. Copelen, Agent.

NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY.

*Office, southwest corner Main and Front sts., Cincinnati, O.*

William Philips, President; Benj. R. Storms, Secretary.

Applications for Insurance in the above reliable Company, received by

Henry C. Urner, Agent.

PENN MUTUAL LIFE INSURANCE COMPANY, of Philadelphia.

*No. 118 West Sixth street.*

Chas. Bonsall, Agent.

David Miller, President; Jno. W. Horner, Secretary.

MUTUAL BENEFIT LIFE INSURANCE.

*Office, southwest corner Fourth and Walnut streets, north of Carlisle's building.*

Day & Truax, Agents.

Dr. O. D. Norton, No. 181 Western Row, Medical examiner.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY, Hartford, Conn.

*Office, No. 33 west Third street, Cincinnati, O.*

Capital, \$3,000,000.

James Goodwin, President; Guy R. Philips, Cashier; M. Hollingshead, Agent.

This is a strictly Mutual Company, and is enabled to offer the security of a reliable insurance, upon better terms than any other company doing business in the West.

NORTHWESTERN INSURANCE COMPANY.

Capital, \$150,000.

*Office, No. 41 Main street.*

James Platt, President; S. B. Ludlow, Secretary; Agent in Cincinnati, Wm. Goodman.

HOPE FIRE INSURANCE COMPANY, New York.

*Office, 33 Wall street—Mechanics' Bank building.*

John W. Shipley, Agent, No. 4 west Third st., Cincinnati, O.

Jacob Reese, President; Thos. Greenleaf, Secretary.

Directors—Stephen Cambreleng, Robert Schell, Jacob Reese, Jas. S. Sandford, Joseph Foulke, John R. Suydam, William Lewis Morris, Theo. W. Riley, Henry Beadel, Chas. D. Smith, John Penfold, Wm. M. M'Intire, Stephen Hyatt, Wm. C. Wetmore, Joseph Grafton, Jun., John W. Mersereau, Wm. Remsen, D. Lydig Suydam, Thos. C. Smith, Joseph Rudd, Fredk. Schuchardt, Henry S. Leverich, Lebbeus B. Ward, Joseph Britton, Wm. H. Terry, Benj. Babcock, Amos Robbins, George Clark, S. B. Althause, William Whitewright, Jun.

This Company, with a cash capital of \$150,000, insures buildings, merchandise, vessels in port, and personal property generally, against loss or damage by Fire, on the most favorable terms.

NEW YORK INDEMNITY INSURANCE COMPANY, of Albany, N. Y.

Cash Capital, \$200,000.

Agent in Cincinnati, John W. Shipley, No. 4 West Third street, Bank Buildings

## MUTUAL LIFE INSURANCE COMPANY, of New York.

Accumulated Cash Assets, \$5,300,000 — the property of the assured.

F. Swinston, President.

Agent in Cincinnati, John W. Shipley, No. 4 west Third street; Medical examiner, J. P. Judkins, M. D.

## ÆTNA INSURANCE COMPANY, of Hartford, Conn.

*Branch Office, 171 Vine street, Cincinnati, O.*

Incorporated 1819.

Thos. K. Brace, President; E. C. Ripley, Vice President.

T. A. Alexander, Secretary; B. Bagnall, J. B. Bennett, General Agents; A. A. Williams, W. F. Church, F. C. Bennet, Adjusters.

Directors—T. K. Brace, J. Church, M. A. Tuttle, E. A. Bulkely, E. G. Ripley, H. Z. Pratt, G. F. Davis, T. A. Alexander, S. Tudor, R. Buell, E. Flower, R. Mather, S. S. Ward, A. Dunham, D. Hill-  
yer, W. Keney.

Agency established in Cincinnati in 1825—antedating all present local Insurance Companies and Agencies, in the Insurance business of this city. Thirty-three years' constant duty here, combined with wealth, experience, enterprise, and liberality, especially commend the Ætna Insurance Company to the favorable patronage of this community, standing solitary and alone, the sole survivor and living pioneer of Cincinnati underwriters of 1825.

Successful enterprises, of pith and moment, have their base of operations in favorite localities.

The business of Insurance is growing in importance, in due proportion with the progress of the country, and its wealth, that it so greatly protects—calling to its aid, bona fide capital, experience, and energy, for its successful prosecution on an extended scale.

The Ætna Insurance Company of Hartford, having six hundred and thirty-five Agencies, in the Ohio and Mississippi valley, and region of the Northern Lakes, concentrates the business of over \$700,000, cash Premiums, per annum, at its Cincinnati Branch.

It has purchased the Building and Lot, 171 Vine street, specially for its use; cost, \$23,000; employs twenty-five persons therein; disburses over \$35,000 per annum for supplies and expenses to manufacturing and other interests. Such operations benefit the trade

of Cincinnati and indicate the preference for its radiating advantages as a mercantile centre.

PHŒNIX INSURANCE COMPANY, of Hartford, Conn.

*Office, No. 275 Main street, Hill's Buildings.*

Simeon L. Loomis, President ; Henry Kellogg, Secretary.

Directors and Officers—S. L. Loomis, Chester Adams, Erastus Smith, J. N. Butler, N. M. Waterman, Wm. D. Shipman, Elisha T. Smith, Lyman Stockbridge, Jos. Merriman, Daniel P. Crosby, Marshall Jewell, Harvey Jewell, Boston, George W. Moore, Chas. M. Beach, H. R. Hills, D. H. Arnold, N. Y., Ezra White, N. Y.

*Branch*—For the States of Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Missouri, Kentucky, Tennessee, Arkansas, Mississippi, Georgia, Alabama, Louisiana, Texas, and territories of Minnesota, Kansas, and Nebraska, located at Cincinnati—Office, Nos. 31 and 33 west Third street, opposite new Masonic Temple, under the direction of—

M. Magill, General Agent.

R. H. Magill, H. M. Magill, Adjusters.

Agencies in all the principal cities and towns of the Union, under the administration of gentlemen of known reputation as experienced underwriters, who will attend to all business connected with their agencies, with promptness and ability.

M. Hollingshead, Agent, Cincinnati.

Fred. Wise, Agent, Covington, Ky.

This eminent, and truly National Insurance Company, doing business in all the States and Territories of the Union, has, by an honorable and liberal course of dealing, in all its transactions, secured for itself the confidence and esteem of every community; and its name, "Phœnix," has become a "household word," and familiar to almost every person throughout the land. In respect to Losses — part and parcel of the insurance business — the Phœnix has cause to be proud of the reputation she has acquired in the settlement thereof—the facilities furnished claimants in the making up of their proofs — denied by many companies — fair and liberal adjustments, avoiding a resort to technicalities in order to reduce or *stave* a claim — and the prompt cash payment of all honest Losses—recommends and entitles the Phœnix, in a very especial



1871



WATERBURY

WATERBURY COMPANY



WATERBURY COMPANY



WATERBURY COMPANY

WATERBURY COMPANY



manner, to the confidence and patronage of the mercantile community.

The Phœnix Insurance Company was incorporated by the Legislature of Connecticut under a perpetual Charter, with a Cash capital of Two Hundred Thousand dollars—Assets, at this time, amounting to Three Hundred and Fifty Thousand dollars—and constantly enlarging—invested in the most reliable securities of the country, and of such a character as to be convertible into Cash at any moment. This is *real* and *tangible*, and pledged for the payment of Losses occurring under their policies. Since its incorporation, the Phœnix Company has transacted a large, and on the whole, a prosperous business throughout the Union; and the manner in which the affairs of the Company have been managed, has inspired unusual confidence in the minds of the public toward the Phœnix—so that their Policies are eagerly sought after.

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BANKS AND BANKERS.

COMMERCIAL BANK.

132 *Main street.*

James Hall, President; Charles B. Foote, Cashier.

Directors—Jacob Strader, James Hall, Rufus King, Larz Anderson, W. J. Whiteman.

LAFAYETTE BANKING COMPANY.

North side Third, between Main and Walnut streets.

Samuel Wiggins, George Carlisle, C. P. Cassilly, Proprietors.
W. G. W. Gano, Cashier; Hy. Peachey, Assistant Cashier.

GROESBECK & Co.

North side Third, between Main and Walnut streets.

J. H. Groesbeck, J. C. Culbertson, Charles H. Kilgour.
T. M. Jackson, Cashier.

JAMES GILMORE.
WM. T. DUNLAP.

THOS. D. ROBINSON
JOHN W. MULLIKIN.

GILMORE, DUNLAP & Co.—Bankers.

Northeast corner Third and Walnut streets.

Deal in Exchange, chiefly, and make Collections throughout the Western country.

JASON EVANS.
BRIGGS SWIFT.

H. W. HUGHES.
W. T. DRAKE.

EVANS & Co.

Southwest corner of Third and Walnut streets.

Bankers and dealers in Exchange.

JOHN R. MORTON.

CALVIN W. THOMAS.

J. R. MORTON & Co.—Bankers.

No. 29 west Third street, Cincinnati, O.

Dealers in Exchange, Bank Notes, and Coin.

Particular attention given to Collections, and returns promptly made.

References — Van Vleck, Read & Drexel, New York; Irving Bank, N. Y., Drexel & Co., Philadelphia; Atlantic Bank, Boston; Citizens' Bank, Baltimore; Canal Bank, New Orleans.

JAMES F. MELINE & Co.

West Third street, Cincinnati, O

Bankers and dealers in Exchange.

Buy and sell Exchange on all the principal cities.

Collections and remittances promptly made at the current rate of Exchange, without charge for Collection.

C. F. ADAE & Co.

GERMAN SAVINGS' INSTITUTION.

Southwest corner of Main and Third streets, Cincinnati, O.

Bank of Discount and Deposits.

Collections made in the United States and in Europe.

Draw upon all the principal cities of the continent of Europe, in sums to suit purchasers, and at the lowest New York rates.

C. F. ADAE.

EUROPEAN EXCHANGE OFFICE.

Southwest corner of Main and Third streets, Cincinnati, O.

Has all facilities, by long experience and an extended correspondence, to attend to any business on the continent of Europe.

Advice and information will be cheerfully given *gratis*, in writing, or upon verbal application.

BANK OF SAVINGS—ALEX. VAN HAMM.

No. 111 West Sixth street, Cincinnati.

For the Deposit of the Earnings of Men and Women, Boys and Girls, in sums of Twenty-five cents and upward.

This Bank allows Interest on Deposits, deals in Gold and Silver, and Uncurrent and Broken bank money.

Discounts good Business Notes, and grants temporary Loans of money.

Pays particular attention to the Collection of Notes, Drafts and Accounts, and all other money obligations, which require the services of a Banker or Attorney.

Remittances made promptly, and Charges reasonable.

MATTHIAS W. DAY, JR.

EDMUND A. TRUAX.

GENERAL AGENCY—DAY & TRUAX.

Office, southwest corner Fourth and Walnut streets, No. 1 Carlisle building, second floor, Cincinnati, O.

Having prompt and reliable correspondents throughout the United States, are prepared to give particular attention to the collection of Notes, Drafts, Bills of Exchange, Rents, Dividends, etc.

Money, Inheritances, and every other claim, collected in all countries of Europe.

Sight Drafts on England, Ireland, Scotland, France, Germany, and all other countries of Europe.

EMIGRANT AND REMITTANCE OFFICE—WM. B. BARRY & Co.

Fourth street, Postoffice Building.

Drafts payable through England, Ireland and Scotland, for sale at five dollars to the one pound sterling.

Certificates of Passage from Liverpool to Cincinnati, or any of the western cities, per the favorite Black Ball line of Packets, or the Steamships from New York to Galway, Cork, Belfast and Londonderry, for sale at reduced prices.

Remittances made from any part of the country, for Drafts or Passage, shall be promptly acknowledged, and remitted as directed.

X. TRANSPORTATION AND TRAVEL.

NATURAL AND ARTIFICIAL ROUTES.

RAILROADS.

OF all modern inventions, the Railway is, for the purposes of commerce, the most useful, and the one which has most influence on the destiny of interior towns. It has afforded interior cities a power far greater than those on the ocean coast, by giving them the means of creating artificial *radii*, and lines of commerce to every point of the great circumference, by which they are surrounded; and if going beyond that, and traversing mountains and valleys, to the remotest parts of the continent. In this respect, Cincinnati stands pre-eminent. Another section of this publication has elsewhere exhibited her superiority in centrality of position, in the vast area of which she is the metropolis, and in possessing the shortest radial lines to the great parts. It is evident, however, that the Railway is essential to give a vital, practical power to these superior natural advantages. Clearly seeing this, her citizens commenced at an early day to plan and execute great lines of Railway, which should connect this city with the principal cities of the Atlantic and the Lakes. In doing so, they were greatly aided by the corporate subscriptions of the city of Cincinnati. A large part of the railway lines originally planned, have been completed; others, however, important and vital to the interests of this city, yet remain unfinished. In the following Table of Railways, complete and incomplete, it has been aimed, first to distinguish them as *commercial lines*, rather than as separate roads; and secondly, to discriminate the Cincinnati lines, by taking all those which proceed *directly* from the city, however long, and no others. In this relation, the New York lines terminate at Cleveland; the Philadelphia line at Pittsburg; the Baltimore lines at Wheeling; the North line direct at Sandusky; the Northwest line at Chicago; the West line at St. Louis; the Southwest line at Nashville; the direct South line at Pensacola, and the Southeastern lines at Savannah, Charleston, and Norfolk.

In the following table will be found an account of each line and road, with the parts complete, and incomplete, as well as all the collateral and branch routes, which modify these general lines.

Table of Railway Lines, leading directly into Cincinnati—distinguishing the Unfinished parts and Connecting links.

1. *East line, New York and Boston, via Cleveland.*

	Miles.
Little Miami Railroad, 65; Xenia and Columbus Railroad, 55; Cincinnati, Columbus and Cleveland Railroad, 135,	255

2. *East—Philadelphia, via Pittsburgh, indirect.*

The above to Crestline, 178; Ohio and Pennsylvania Railroad, 187	- 365
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3. *East—Philadelphia, via Pittsburgh.*

Little Miami, and Xenia and Columbus, 120; Central Ohio, 33; Steubenville and Indiana, 117; Steubenville and Pittsburgh, 40	- 310
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4. *East, to Zanesville, Ohio.*

Little Miami, and Xenia and Columbus, 120; Central Ohio, 59,	- 179
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5. *East, to Zanesville, O.*

Little Miami, 36; Cincinnati, Wilmington and Zanesville Railroad, 131	- 167
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6. *East—Baltimore, via Columbus and Wheeling.*

Little Miami, and Xenia and Columbus Railroad, 120; Ohio Central, 141	- 261
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7. *East—Hillsboro', O.*

Marietta and Cincinnati Railroad, 39; Hillsboro' branch Railroad, 21	- 60
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8. *North—Sandusky.*

Cincinnati, Hamilton and Dayton Railroad, 60; Mad River and Lake Erie, 153	- 213
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9. *Northwest, to Chicago.*

Cincinnati and Indianapolis Railroad, 110; Lafayette and Indianapolis Railroad, 64; New Albany and Salem, 91; Michigan Central, 57	- 322
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10. *Northwest, to Chicago.*

Cincinnati, Hamilton and Dayton Railroad, 25 ; Cincinnati and Chicago, 45 ; Indiana Central, 68 ; Lafayette and Indianapolis Railroad, 64 ; New Albany and Salem, 91 ; Michigan Central, 57	- - - - -	- - - - -	350
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11. *West Line, St. Louis—direct.*

Ohio and Mississippi Railroad,	- - - - -	340
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12. *West Line, St. Louis—indirect.*

Cincinnati and Indianapolis Railroad, 110 ; Terre Haute and Richmond, 73 ; Terre Haute, and Alton, 187	- - -	370
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13. *Auxiliary Lines Northeast.*

Dayton and Xenia Railroad,	- - - - -	16
Springfield and Mt. Vernon Railroad,	- - - - -	49
Springfield and Columbus Railroad,	- - - - -	20— 85

14. *Auxiliary Lines North.*

Springfield Branch Little Miami Railroad,	- - - - -	20
Findley “ “ “ - - - -	- - - - -	15
Greenville Miami Railroad,	- - - - -	47— 82

15. *Auxiliary Lines Northwest.*

Dayton and Michigan,	- - - - -	40
Newcastle and Richmond,	- - - - -	28
Indiana Central Railroad,	- - - - -	108— 176

16. *Auxiliary Lines Southwest.*

Madison Railroad, Ind.,	- - - - -	87
Shelbyville Central Railroad, Ind.,	- - - - -	16
Jeffersonville Railroad,	- - - - -	77
New Albany and Salem Railroad, South,	- - - - -	51— 231

17. *Auxiliary Lines South.*

Atlanta and West Point Railroad,	- - - - -	87
West Point and Montgomery Railroad,	- - - - -	88
Kingston and Rome Railroad, Ga.,	- - - - -	19
Nashville, Chattanooga, and Dalton Railroad,	- - - - -	189— 383

Deduct from this table lines which occur twice in different routes, 902 miles, and we have an aggregate of finished Railways of 2275 miles, and of auxiliaries, 957 miles, total, 3232

In addition to these we have, of Railways finished in part:

18. *East Line.*

<i>Northwestern Railroad, Va.,</i>	-	-	-	-	-	-	120
Baltimore, via Marietta,	-	-	-	-	-	-	173

19. *Northwest—Chicago, direct.*

Cincinnati, Hamilton and Dayton Railroad, 25; Cincinnati and Chicago, 77	-	-	-	-	-	-	102
<i>Cincinnati and Chicago Railroad,</i>	-	-	-	-	-	-	152

20. *North Line—Toledo.*

Cincinnati, Hamilton, and Dayton Railroad, 60; Dayton and Michigan Railroad, 72; <i>Dayton and Michigan Railroad,</i> 68	-	-	-	-	-	-	132
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21. *Southwest Line, via Cairo, Ill.*

Ohio and Mississippi Railroad, 276; Illinois Central Railroad, 120; Ohio and Mobile, 219	-	-	-	-	-	-	615
<i>Ohio and Mobile,</i>	-	-	-	-	-	-	261

22. *Southwest—Nashville and Memphis.*

Covington and Lexington, 99; Lexington and Danville, 12; <i>Lexington and Danville,</i> 24; <i>Cincinnati and Nashville,</i> 170; <i>Nashville and Memphis,</i> 215	-	-	-	-	-	-	111
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23. *South Line, direct, via McMinnville and Pensacola.*

Cincinnati, Lexington and Danville Railroad, 111; <i>Cincinnati, Lexington, and Danville,</i> 24; <i>Southwestern,</i> 163	-	-	-	-	-	-	
McMinnville via Manchester to Montevallo, 35; <i>McMinn. via Manch. and Mont,</i> 154; Selma and Montevallo, 56; <i>Selma to Pensacola,</i> 140	-	-	-	-	-	-	202

24. *Southeast Line to Savannah, via Knoxville.*

Cincinnati to Danville, 111; <i>Cincinnati to Danville,</i> 24; <i>Kentucky Union Railroad,</i> 90; <i>Cin'ti. and Cumberland Gap,</i> 30; East Tennessee and Virginia Railroad, 40; East Tennessee and Georgia, 110; Western and Atlantic, 100; Macon and Western, 101; Central Georgia, Railroad, 191	-	-	-	-	-	-	653
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25. *Southeast Line to Charleston, via Knoxville.*

Cincinnati to Danville, 111; <i>Cincinnati to Danville,</i> 24; <i>Kentucky Union Railroad,</i> 90; <i>East Tennessee and Kentucky,</i> 90; <i>Blue Ridge, Railroad,</i> 170; Greenville and Columbia Railroad, 127; Columbia and Charleston, 62	-	-	-	-	-	-	300
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26. *Southeast to Charleston via Augusta, Ga.*

Same as No. 24, to Atlanta, 358; to Atlanta, 144; Georgia Railroad, 171; South Carolina Railroad, 137 - - 666

27. *Southeast to Richmond, Va., via Guyandotte.*

Cincinnati and Marietta, 120; Gallipolis and Jackson, 35; Covington and Ohio Railroad, 180; Virginia Central, 195 - - - - - 315

28. *Southeast Line to Lynchburg, Va.*

Cincinnati to East Tennessee, on Virginia Railroad, via No. 24, 108; Cincinnati to East Tennessee, via Virginia Railroad, 144; East Tennessee and Virginia, 130; Virginia and East Tennessee, 135; Virginia and East Tennessee Railroad, 70 - - - - - 373

Here are eleven roads additional, of which there are finished, in part, deducting all duplications in routes to the extent of, miles - - - - - 2423
Leaving unfinished, do. - - - - - 2666

It will thus be seen that we have the full use of 3232 miles of Railway, and that there are 4789 miles of other roads, more than one-half of which are completed and in use, and as soon as the residue is finished, which must be the case in a few years, we shall be in full connection with upward of eight thousand miles of Railway.

There are two roads, leading from Cincinnati, not embraced in the above, because they have not been constructed, although much in the way of preparation has been done. There are on the way, the Dayton Short Line, fifty-two miles, and the Cincinnati and Indianapolis Junction Railroad, one hundred miles in length.

This last railway connects with the Cincinnati, Hamilton and Dayton Railroad at Hamilton, and runs via Oxford, Connersville and Rushville, to Indianapolis. The work ready for the iron is done, including bridges, ties, etc., as far as Evansville, and the iron down to Oxford; and the balance to Evansville will be down during the year.

This road runs through the very best portion of Indiana, and will add a valuable link to the Cincinnati, Hamilton and Dayton Railroad.

LITTLE MIAMI RAILROAD COMPANY.

Officers — President, Nathaniel Wright; Superintendent, John Durand; Treasurer, D. G. A. Davenport; Secretary, C. H. Kilgour; Auditor, Smithson E. Wright.

Directors—Jacob Strader, R. R. Springer, J. H. Groesbeck, N. Wright, Jas. Hicks, Jun., Larz Anderson, Alphonso Taft, C. H. Kilgour, Henry Hanna, of Cincinnati; John Bacon, of Springfield; Abm. Hivling, Xenia; W. B. Hubbard, Columbus.

THREE DAILY TRAINS.

9 A. M. — Cleveland, Pittsburgh, Steubenville, and Wheeling Day Express—For all Eastern cities.

4-15 P. M.—Columbus, Xenia, and Springfield Accommodation.

11-30 P. M.—Cleveland, Pittsburgh, Steubenville, and Wheeling Night Express—For all Eastern cities.

This train is provided with Sleeping Cars. The Night Express train, leaving Cincinnati at 11-30 P. M., runs daily, except Saturdays. All other trains run daily, except on Sundays.

Trains run by Columbus time, which is *seven* minutes faster than Cincinnati time.

OHIO AND MISSISSIPPI BROAD GAUGE RAILROAD Co.

Joseph W. Alsop, New York, President; Wm. H. Clement, Vice President and General Superintendent; L. B. Parsons, Treasurer; Sam'l Trevor, Secretary; P. W. Strader, General Ticket Agent; Thomas Lough, General Freight Agent; P. Vandeursen, Auditor; E. Lippencott, Pay Master; R. D. Vandeursen, Purchasing Agent.

Wm. H. Aspinwall, Joseph W. Alsop, Henry Chauncey, Sam'l W. Comstock, Edwin Bonslett, Edward Leonard, Charles Gould, L. D. Comar, Edward Delano, Wm. Whitewright, S. L. M. Barlow, N. Y., S. M. Pomeroy, Henry C. Lord, James C. Hall, Wm. H. Clement, Joseph Torrence, Thos. G. Mitchell, Larz Anderson, Lewis B. Parsons, James Hall, Cincinnati, Henry D. Bacon, St. Louis Directors.

*Officers of the Cincinnati, Hamilton and Dayton Railroad Co.,
Elected for 1858.*

S. S. L'Hommedieu, President, Cincinnati; Geo. Carlisle, Vice President, Cincinnati; Lafayette Banking Company, Treasurer; Frederick H. Short, Secretary; Daniel McLaren, Superintendent; John M. Osborn, General Freight Agent.

S. S. L'Hommedieu, Geo. Carlisle, John C. Wright, John W. Ellis, Geo. H. Hill, Stanley Matthews, E. J. Miller, Cincinnati, Jacob Shaffer, Hamilton, Joseph B. Varnum, New York, Directors.

XII. SUBURBS.

Cincinnati is surrounded with suburbs of charming natural features and highly judicious improvement. They form, to a great extent, residences for those of our citizens who wish to combine the enjoyment of the country with their city employments and pursuits. Two of these, only, will be referred to in this place, and simply to describe their educational features—College Hill and Glendale.

College Hill is six miles—nearly north—from the city, and among other attractions, is the seat of two very important educational establishments—Farmers' College for young men, and the Ohio Female College, for young ladies.

A lithographic view of this last named establishment will be found in this volume. It will afford a general idea of the buildings and grounds.

The main edifice—one hundred and fifty by eighty-one feet, and in height three stories, besides a basement and attic—is a model of architectural taste. But its chief excellence consists in a perfect system of ventilation, connected with a plan of warming by steam, so complete as to secure a uniform temperature throughout the entire building, and a change of air in every room once in thirty minutes. In these features it is more extensive and complete than any building, public or private, in the State. By these various arrangements, pure air, so essential to physical health and mental vigor and elasticity, pervades every apartment. This is of the highest importance in educational establishments, and parents and guardians having daughters and wards to educate, should pay great

attention to this subject, as impure air in school-rooms and bed-rooms sends many a youth of bright promise to an early grave.

The Ventilation.—About one hundred feet from the school edifice, has been built a brick tower, or flue, fifteen feet high, and through an apparatus of sheet iron on the top, the air is drawn into this tower and conveyed under the building by a brick duct. This duct is under ground and laid in cement, so as to be always dry. It is five and a half feet deep and four and a half feet wide, and two hundred and fifty feet long, and contains thirty thousand bricks. It extends from the base of the tower to the furthest extremity of the building, and connects with six air chambers, each seven feet deep, seven feet wide, and fifty feet long, which are also walled up and paved with brick and cement.

From these air chambers, flues extend to all the rooms and halls in the building, each room and hall having its own flue to supply pure air, and an additional flue to carry off the impure air, the supply and discharge of which are regulated by registers. The fresh air flues all terminate in three rooms under the three cupolas, in each of which is a coil of steam pipes, by which the air is rarefied, and thereby creates a circulation sufficient to change the air in every room once in thirty minutes.

The Warming.—About two hundred feet from the main building is a boiler house, in which are two boilers for generating steam, a small engine and steam pump, and a great variety of apparatus connected with the economy of the establishment.

From these boilers, steam is conducted by pipes laid in a brick duct, to the six air chambers under the college building, where it passes through more than thirty thousand feet of pipe, and then returns into a receiver in the boiler house, and by the steam pump is forced into the boilers, to be converted anew into steam, and to perform again the same circuit. Fresh air from the top of the tower is constantly flowing through the air duct into these air chambers, and after passing over the heated pipes, rises through the flues to the rooms, and from the rooms, by the foul air flues, is discharged under the cupolas.

This gives all the rooms in winter a constant supply of pure, warm air, the temperature of which can be regulated at will, but it can never become impure, for whether hot or cold, it is always flowing in from the atmosphere outside.

The apparatus for warming and ventilating cost over ten thousand dollars.

Every room and hall in this edifice is lighted with rosin gas, and supplied with pure filtered rain water, and eight bath rooms, furnished with warm, cold and shower baths, are free to all the inmates.

The college owns twenty-three acres of ground ; four acres of which are used for a vegetable, fruit and flower garden, and kept in a high state of cultivation. The other nineteen acres, naturally beautiful and picturesque, are improved and adorned by the science and skill of a landscape gardener, who also has charge of a large conservatory of native and exotic plants and flowers.

President, Rev. H. N. Day. Principal, Mrs. W. W. Robinson. Lecturer on the Science of Government and Constitutional Law, S. F. Cary, A. M., A. B. Teachers of Languages, Science and Literature, Professor J. P. Klund, Mrs. Mary J. Pyle, Miss E. H. Allison, Miss Julia P. Klund, Miss M. Henderson, Miss Mary K. Taylor. Music, Piano and Vocal, Prof. George Georgi, Miss Emma Paige, Miss Ella Paige, Miss Mary Anna Cox. Guitar, Henry Worrell. Drawing and Painting, Miss Lizzie Stewart. Matrons, Mrs. C. M. Vail, Mrs. H. M. Taylor, Mrs. H. N. Day.

Glendale is fifteen miles from the city, by the Cincinnati, Hamilton and Dayton Railroad, which affords a ready, convenient and frequent opportunity of communicating with our great metropolis.

One of the most interesting features in the place is the Glendale Female College. Faculty, fifteen ; number of pupils, one hundred and eight.

Faculty.—Joseph G. Monfort, D. D., president ; Rev. Samuel S. Potter, A. M., Rev. Ludlow D. Potter, A. M., Mrs. E. J. McFerson, associate principal, Mrs. Hannah Monfort, Mrs. Phebe Potter, Miss Sarah Parke Morrison, Miss Mary Parke McFerson, C. B. Chapman, M. D., Lecturer on the Natural Sciences, Mons. Leon Rivé, Painting and German, Mons. Philibert Beaugureau, Drawing and French. Department of music—Madame Caroline Rivé, principal, Miss Harriet Staub.

The location of this institution, fifteen miles north of Cincinnati, on the Cincinnati, Hamilton and Dayton Railroad, gives it superior advantages. It is accessible, and remarkably healthy—not a serious case of sickness having occurred in the institution since its establishment. No better location could have been selected for a







OHIO FEMALE COLLEGE HILL D.

7 A. BIRNEY & CO. N.Y.

female college. It is a beautiful and attractive place, laid out by an association of gentlemen from Cincinnati as a suburban village. The taste displayed in gardens, groves, and walks, together with its handsome natural scenery, cannot fail to please the eye and cultivate a taste for the beautiful in nature and art. Add to this the refined social advantages, the entire absence of the various excitements and temptations that attend female institutions located in cities, and in the immediate vicinity of institutions for young men, and its facilities, by railroad communication in all directions, and we have a combination of attractions superior to any that can be found in the western country.

The musical department is under the direction of Madame Caroline Rivé, who was educated in Paris, under Garcia, and is, perhaps, unequalled in this country. She is aided by her sister, Miss Staub, who is also favorably known as a distinguished vocalist.

With these facilities, and having associated with them instructors, all of whom are practical and experienced teachers, and having adopted a course of instruction as elevated as that of any similar institution, the proprietors are determined that no exertion on their part shall be wanting to make this institution equal to any in the country, to qualify young ladies for teachers of seminaries, for missionaries, for usefulness in any station of life, and for the highest grade of refined literary society.

Accommodations.—The main building, an imposing structure, is one hundred and seventeen feet long and three stories high, exclusive of basement, containing forty rooms, well furnished.

A new and beautiful chapel and concert hall, sixty-eight feet by forty-two, has been erected for purposes of instruction and public worship. The first story contains six recitation rooms, the second, one spacious hall, in which the pupils will assemble daily for devotional exercises, and, on the Sabbath, with the congregation, for public worship, and in which will be given frequent scientific lectures, and occasional concerts by teachers and scholars.

To the main building has been added, during the past year, a wing sixty-two feet in length, containing a spacious dining room and nine music rooms.

Applications.—Applications for admission, and all letters of inquiry, or on business relating to the institution, should be directed, "Glendale Female College," Glendale, Hamilton county, Ohio.

XI. MANUFACTURES AND INDUSTRIAL PRODUCTS.

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WITH the exception of Philadelphia, Cincinnati is probably the most extensive manufacturing city in the United States. All the materials and facilities for this industrial department, exist here in an abundance not to be found at other points; a marked prominence, as well as space, is therefore given, in this volume, to our manufactures and mechanical arts, and their results. Details are given, to afford the opportunity to those who are interested in this subject, to follow the writer of these pages in his investigations, and determine by a scrutiny, the accuracy of the aggregates they make, and the justice of the deductions to which they point.

The summary exhibited at the close of this department, exhibits distinctly the value to the community of this right arm of its strength, and principal source of its wealth. The value of the trade and commerce of Cincinnati, is probably eighty millions of dollars; profit, say,  $12\frac{1}{2}$  per cent., or ten millions; of the manufacturing and mechanical operations, ninety millions—profit,  $33\frac{1}{8}$  per cent., or thirty million dollars. The first employs a force of fifty-six hundred individuals; the second a force of forty-five thousand.

*Agricultural Machinery, and Implements*—This is a department of manufactures here, which had barely a commencement, in 1841, in eight factories, employing forty-five hands, and affording a product of forty-nine thousand four hundred dollars. It has now reached a value of thirteen hundred and ninety-five thousand dollars, affording occupation to six hundred and twenty hands; value of raw materials, 65 per cent.

A wide range of implements and machinery is made, although the bulky and heavy articles—of mowers and reapers—are not yet extensively manufactured; a few years, however, will supply the deficiency in this line.

There are twenty establishments engaged in this department, of which four are at work upon plows and plow molds alone. Every variety of farmers' implements is supplied in this city, and immediate vicinity, such as harvesters, mowers, rakers, reapers, grain threshers, horse powers, corn and cob grinding mills, cider mills,



fanning mills, harrows, corn planters, plows in every variety, cultivators, drilling machinery, ground feed and vegetable steam boilers, road scrapers, apparatus for making sugar and molasses from the sorgho, or Chinese sugar cane, corn-shellers, straw cutters, horse rakes, wine, cheese, lard, and hay presses, clover hullers, barrows, churns, and various minor articles. These are manufactured to a constantly increasing extent.

The plow department alone employs eighty-three hands, and turns out plows and plow molds to the value of one hundred and forty-six thousand dollars.

Samuel Males, 96 Everett street, makes, as one apparatus, a convertible cider mill, corn-sheller, and vegetable grinder, susceptible of being, in one minute, changed from any one to any other of these purposes. A press is connected with this machine, capable of pressing cider, lard, or cheese. The apparatus will grind five bushels of apples in a minute. Although it has not been more than fourteen months before the public, it obtained at twenty-four national, State, county, and mechanics' fairs, fifty-five first premiums, silver cups, silver medals, or diplomas. Raw material, 60 per cent., value of annual product, ninety-six thousand dollars.

James Townsend, No. 201 Maple street, has the patent right of this apparatus, for several counties in Illinois, and is manufacturing them for the southern part of that State, where a large demand will be created for the article.

Hedges, Free & Co., No. 6 Main street, manufacture a variety of agricultural machinery, among which are the *Little Giant* corn and cob crushers, agricultural steam boilers, apparatus for making sugar and molasses from the Chinese sugar cane, corn shellers, stalk cutters and fodder mills and road scrapers. The agricultural steam boiler enables the farmer to cook feed for his stock, steam his cut straw, hay, and corn stalks, and to heat water for the family washing, as well as for other purposes. It is provided with a safety valve, by which the apparatus relieves itself of surplus steam, whenever necessary. It also gives due notice when the water is getting low in the boiler. In towns and cities, it is of great convenience as well as value, to hotels and large boarding houses; also, to dyers and tanners, as the steam-pipe, plunged into the wash-tubs, dye vessels, or tan vats, without further trouble raises the temperature of the water to the desired point, boiling cold water in one-third the time, and with one-fourth the fuel

usually required. Of these, in three sizes, they make one thousand annually.

Their corn and cob crushers are extensively known and approved. Two thousand of these are every year turned out from their factory.

One of the most important articles they make, is their sugar mills, horizontal and vertical, for grinding the Chinese sugar cane. As this cane has now become one of the great staples of the United States, an article so well adapted as is this to the purpose, is of great importance. Orders for these mills have been received from every section of the west—from Philadelphia and other points east, and from California, and even from those portions of the south not adapted to the ordinary sugar culture. Of these mills, although the demand, as well as the manufacturing is yet in its infancy, this concern already makes at the rate of fifty per week. The engravings at the close of this volume, will give some idea of the various descriptions of this sugar making apparatus. They employ eighty hands, and manufacture to the value of two hundred and sixty-two thousand dollars; raw material, 70 per cent.

The factory of W. W. Hamer & Co., at the northeast corner of Second and Western Row, presents an interesting feature in the present department. Here may be seen as a specimen, in actual operation, a grinding and bolting flour mill, equally simple and efficient, designed to obviate the existing style of large and complicated flouring and grist mills, so expensive in first cost, and constant repairs, and confining the business to heavy capitalists alone.

In this mill, the wheat is put into the hopper and passes through the entire grinding and bolting process at one operation, the flour coming out already prepared for packing in barrels. The entire machinery, burrs, bolt, conveyers and elevators, being driven by a single belt. The burrs are three feet diameter, and the bolt twenty feet long. The entire space occupied by the mill, smut machine, flour packer, wheat bin—holding eight hundred bushels of wheat—is twenty-seven feet by twelve, on one floor, the story being twelve feet high. It is claimed that, under this process, the yield is greater, and the flour superior to that made in merchant mills. There can be no question that the reduction in the breadth of burr millstones, renders the grinding more uniform, by its preventing any portion from being so far ground over and over, as to destroy the liveliness of the flour; on which account this mill com-

bines the advantages of the ordinary portable, and the merchant mill. They have, also, upon the premises, two corn mills, running with thirty inch burrs, which turn out fifty to sixty bushels per hour. Another great advantage in these mills, is the small amount of power necessary to run them, compared with the ordinary mills. To meet the views of all customers, they build both upper and under runners.

W. W. Hamer & Co. also get up portable engines and boilers, smut machines, corn shellers, bran dusters, flour packers, and mill gearing of all kinds, and furnish genuine Dutch ankerbrand bolt-ing-cloths, leather belting, etc. They employ forty-five hands, and manufacture, annually, to the value of one hundred and twenty thousand dollars ; raw material, 65 per cent.

Elmers & Forkner, Nos. 600 and 602, west Fifth street, manufacture *Young America* corn and cob mills, *Darling's* endless chain friction roller horse powers, *Hamilton's* wheat drills, iron threshers and cleaners, cross-cut saw tables, for wood-cutting, and agricultural steam boilers; also, stoves and castings of various kinds. They employ fifty hands ; value of products one hundred and twenty thousand dollars ; raw material, 40 per cent.

James Bradford & Co., northwest corner Elm and Second streets, office 65 Walnut street, manufacture French burr millstones, portable mills, corn and cob crushers, smut machines, hoisting screws, tempering screws, mill spindles, screen wire, mill castings, and damsel irons. Plaster paris, land plaster, hydraulic cement constantly on hand.

Their portable mills are in successful operation in this city, competing with merchant mill-work, making as good flour, and as great yield, as can possibly be done upon any four, or four-and-a-half feet, that are running and capable of making fifty to sixty barrels superfine flour in twenty-four hours. Bradford & Co. warrant their portable mill to be equal, in quality and performance, to any portable mill in use. They have averaged three hundred and sixty pairs large millstones per year, beside one hundred portable mills. Sales, fifty thousand dollars annually; employ thirty hands; raw material, burr millstones, 45 per cent ; portable mills, 25 per cent. An improvement has been made in the construction of millstones, by substituting for the four bands, formerly used, one broad one, covering the entire edge, excepting the wearing surface.

James Todd, corner Seventh and Smith streets, whose main

business is foundry work, makes annually, one hundred and twenty portable corn and flour mills; value twenty-two thousand dollars.

Isaac Straub, warehouse No. 19 west Front street, works twenty-five hands; builds annually three hundred and fifty portable mills, running with French burr millstones; also portable saw-mills and steam engines; value of products, seventy-five thousand dollars; raw material, 35 per cent.

Wilder, Robinson & Co., No. 23 Walnut street, manufacture corn shellers and straw cutters to the value of ten thousand dollars; raw material, 50 per cent.

J. H. Burrows & Co., at their foundry, Second street, west of Elm street, build steam engines for driving saw, and grist mills, and manufacture mill machinery of all descriptions. But their principal business is making portable grist mills, of which three hundred are made there yearly, worth one hundred and eighty dollars each, on an average. They employ one hundred hands, and turn out a product of one hundred thousand dollars; raw material, 60 per ct.

These mills are designed for the west and southwest especially, or sections of country where water-power is scarce.

Large quantities of the extra flour made in the West, are ground upon portable mills, made here and at other factories in Cincinnati, and premiums at State fairs have been repeatedly obtained for flour made under this process over competitors whose flour was made at merchant mills.

W. R. Dunlap & Co., corner Front and Lawrence streets, manufacture all kinds of mill machinery, portable flouring mills, with bolts, elevators, and all the machinery complete; burrs, bolting-cloths, smut mills, bran dusters, Kinman's flour packer and Parker's water-wheels. Employ, when in full operation, one hundred hands, and manufacture, of agricultural machinery and implements, a value of forty-five thousand dollars; raw material, 50 per cent.

J. & E. Greenwald, No. 190 East Pearl street, near the Miami canal, manufacture flour and smut mills, cast iron overshot water-wheels, Rich, Crew, Smith & Wurtz's patent water-wheels, flour packers, screen wire, mill screws, burr millstones, leather and gum elastic belting; also, machinery for driving portable flour mills; also, supply bolting cloths. They employ eighty-five hands upon agricultural machinery, with a product of ninety thousand dollars.

Garrett & Cottman, Seventh, west of Main street, manufacture by machinery steel mold boards, and make annually four thousand



plows, of light draught, which scour themselves in all sorts of soils. They employ thirty-five hands; value of product, fifty thousand dollars; raw material, 40 per cent.

J. F. Dair & Co., seed store and agricultural warehouse, adjoining corner Lower Market and Sycamore streets, manufacture and keep for sale a variety of implements and machinery for farmers' purposes, such as mowers and reapers, cultivators, cider mills, harrows, straw cutters, fanning mills, hay presses, horse rakes, and churns, to the annual value of thirteen thousand dollars. This includes only such articles as are made in this vicinity.

J. Coleman & Co., Eighth street, east of Broadway, plow handle manufacturers; steam power; ten hands. They turn out one hundred and fifty thousand pairs plow handles annually; also, make washboard frames; value of product, twenty-four thousand dollars; raw material, 30 per ct.; nine-tenths of these are sold outside the city.

*Alcohol and Spirits of Wine.*—These are articles which, although usually considered the same, are materially different. Alcohol is whisky, distilled to its highest grade of proof, and is employed in the mechanic arts, as the basis of essences and medical tinctures, and as a solvent in various manufacturing operations.

Neutral Spirit, is the same article in point of strength, but divested, in its manufacture, of all empyreumatic odor and taste. It forms the basis of domestic brandies, gins, etc. When abundant harvests in the west are likely to depress the price of corn, the same motive which prompts the farmer to put his crop into pork, by the feeding of it to hogs, suggests, also, its manufacture into whisky; in both cases, a bulky and heavy product, being converted into an article of greater value and profit, because more convenient for transportation to market. The same principle, carried out, induces the conversion of whisky into alcohol, which, condensing nearly two barrels into one, saves one-half the expense of transportation, to various distant markets.

There are nine manufactories here, of these articles, one of which is the largest establishment of the kind in the United States; and there are two others, each of whose product is but little less. Their aggregate capacity of run, day and night, which they do only part of the year, is six hundred and sixty-four barrels per day, or over two hundred thousand barrels per annum. The actual product, annually, reaches only to one hundred and ten thousand barrels, which, at twenty dollars per barrel, is worth two millions two

hundred thousand dollars. The alcohol manufacture uses up almost half the whisky made or brought to the place. Employ one hundred and forty hands; value of raw material, 85 per cent.

There are stills running here, of fourteen hundred, twenty-four hundred, and twenty-eight hundred gallons capacity. The largest operators in this line, are Boyle & Co., Second, between Sycamore and Broadway; Lowell Fletcher, corner of Vine and Front, and D. W. Oliver, Water, near Vine street.

*Ale and Beer.*—Malt liquors are made in Cincinnati, to a greater extent than in any other city in the United States. There are thirty-six breweries here, in three only of which the principal article brewed is ale; lager beer being mainly, or entirely, the product in all the others. This last is manufactured here to an extent of not less than eight million gallons annually, two-thirds of which is consumed in Cincinnati. There is no German who does not use this beverage, and it forms refreshment to one-half of our native population, adults of both classes being referred to. In the winter, the Irish and low Germans generally drink common beer; the high Germans, and Americans who use beer, drink lager exclusively, at all seasons. Lager beer is driving out the consumption of whisky, and the miserable imitations of foreign liquors, so extensively drank for years past.

It is a debatable point whether lager beer will intoxicate, and the question came up regularly before the Kings county circuit court, at Brooklyn, New York, on a trial there of a charge for selling intoxicating liquors, in which defendant made the plea, in defense, that lager did not intoxicate. A synopsis of the testimony on this point, follows:

“Valentine Eckfeldt swore that he had, on one occasion, drank fifteen glasses before breakfast, to give him an appetite.

“Bernhardt Miller had seen a man drink forty glasses in a short time, without being intoxicated. He himself had drunk that number of glasses in the space of about one hour.

“Joseph Siser—who weighs two hundred and twenty-five pounds—drank an average of about forty glasses a day. It never hurt him any. He had drunk lager since he was six or seven years of age, and he was now over fifty.”

Some lager beer glasses were sent for, and exhibited to the jury. They held a pint apiece.

“James White testified to drinking fifty-two glasses of lager in two hours, and a companion drank double the quantity in the same time. It had no intoxicating effect upon either of them.

“Philip Koch testified to drinking a keg of lager on a bet, within the space of two hours. The keg contained seven and a half gallons, or thirty quarts. He felt comfortable afterward, and was not intoxicated. He would frequently drink from sixty to ninety glasses in a day.

“Nicholas Hahnery testified to seeing a man in Bavaria, drink seventy-two glasses between nine and ten o'clock in the morning and not get drunk.

“Dr. Arming testified to the effect that he saw a man in Germany, drink one hundred and sixty pint glasses in a sitting of three or four hours, and yet not show any appearance of intoxication.”

At St. Louis, Mo., on the 2d March last, Frank Lauman, keeper of a lager beer saloon in that city, on a wager of twenty-five dollars, drank one hundred and fifty glasses of lager. By the terms of the bet he was allowed from eight A. M. to twelve P. M. of the same day, to perform this feat. He swallowed fifty glasses before ten o'clock, and by four P. M. he had finished seventy more, being eight hours of the allotted time, and leaving him eight more in which he might dispatch the remaining thirty at his leisure.

It is hardly necessary to add any testimony of my own to this, but I can say freely, that I am knowing to the fact that Dr. Walcker, formerly of the Volksbuhne, drank every day, for a series of years, five gallons of lager, which, with a few pretzels, constituted his entire sustenance. I learn also, on respectable authority, that Professor Kern, of College Hall, drank at that place, six gallons at a sitting, which, it is true, lasted several hours. Some of these, doubtless, are extreme cases, but a gallon to an individual, at convivial parties, is a common allowance.

Dr. James R. Chilton, the celebrated chemical analyst of New York city, ascertained by the usual tests, that lager contained three and three-fourths to four per cent. of alcohol, while in cider he had found nine per cent.; claret, thirteen per cent.; sherry wine, eighteen per cent.; madeira, twenty per cent., and brandy fifty per cent. He says that lager beer will not intoxicate unless drank in extraordinary quantities.

Lager beer can only be made to advantage in the winter season,

not only because when the weather is warm there is danger of the wort, before cooling thoroughly, going into the acetous fermentation, but because it is indispensable that the beer should have ample time to ripen in the cellar, before use. It is made, to a limited extent, however, in summer, by the aid of ice, which being dissolved in copper tubes that are passed through the cooler, serves to check extreme fermentation. But the lager consumed in summer, is generally a winter product, which can be made to last as late as through the ensuing November.

Lager beer is made by what is termed the *under* fermentation, the slow process of which contributes its peculiar flavor, and the first quality of lager is made in establishments which do their own malting. The best lager has a vinous flavor also, in the early stages of fermentation, by which judges readily discover its purity and excellence.

The product of the different breweries is, in half barrels :

|       |       |        |        |        |        |        |
|-------|-------|--------|--------|--------|--------|--------|
| 2,000 | 6,000 | 10,000 | 12,000 | 14,000 | 20,000 | 24,000 |
| 2,000 | 6,000 | 10,000 | 12,000 | 16,000 | 20,000 | 26,000 |
| 5,000 | 6,000 | 10,000 | 12,000 | 16,000 | 24,000 | 32,000 |
| 6,000 | 7,000 | 10,000 | 12,000 | 20,000 | 24,000 | 34,000 |
| 6,000 | 8,000 | 12,000 | 14,000 | 20,000 | 24,000 | 42,000 |

five hundred and twenty-four thousand half barrels, one-tenth of which is ale ; one-fiftieth common beer, and the residue lager—value of product, November to May, \$2½ per barrel ; May to November, \$3 ; ale, \$3 ; aggregate of value, one million five hundred thousand dollars ; number of hands, three hundred and fifteen ; raw material, 75 per cent.

Schaller & Schiff, southeast corner Canal and Plum streets. This is one of the latest, as well as most extensive and complete in construction, of these establishments. It is built on the European plan, being a quadrangle of 127 by 126 feet, with a court in the centre, communicating with the street by a spacious gangway. The building has a space, on every side, averaging more than forty feet in breadth, and is three stories high above the ground ; double arched cellars all through the building, and under the adjacent sidewalk.

These cellars hold 400 casks, ranging in capacity from 600 to 1,250 gallons—the larger share, those of the greater capacity—in which the lager is stowed away to ripen for use.

Almost all the operations, in this brewery, are carried on by



steam, even to the hoisting of materials to the second and third stories; the machinery is so arranged and constructed as to transfer, at pleasure, the raw material from any one side of the building to any other; even the coolers are moved about and emptied by machinery. This concern consumes, annually, 50,000 lbs. hops, and 50,000 bushels barley, which is malted entirely by themselves. Schaller & Schiff make lager beer in summer, and for that purpose use as much as 200,000 lbs. of ice per month. They export a larger proportion of their lager beer than any other establishment here; which is the best testimony of its quality, none but the best admitting transportation to advantage.

It may serve to give some idea of the amount of capital required to carry on a first class brewery, to state, that they have never on hand less than a value, of iron bound casks, of all kinds, of thirty-two thousand dollars, which, as they last not more than eight years, on an average, presents an annual expense, in this item alone, of four thousand dollars, required to carry on these breweries. Schaller & Schiff make forty-two thousand half barrels lager annually, in value, one hundred and ten thousand dollars.

*Animal Charcoal.*—One factory; employs fifteen hands, and produces to the value of thirty thousand dollars; value of raw material, 10 per cent.

*Artificial Flowers.*—Three factories, forty hands, principally females; value of product, twenty-four thousand dollars; of raw material, 40 per cent.

*Awnings, Tents, etc.*—Eight shops, which employ sixty-six hands, and manufacture a product, in value, of fifty-two thousand dollars; raw material, 50 per cent.

*Bakers.*—There are two hundred and twenty bakeries, which employ six hundred and fifty-six hands, and manufacture to the value of nine hundred and sixty thousand two hundred and eighty dollars, in bread, biscuit, etc.; raw material, 60 per cent.

Philip B. Cloon & Co., corner Sycamore and Front. This is an old establishment, which, for many years, has supplied steamboats and the trade with pilot and loaf bread, soda, Boston, sugar, pic-nic, water, and butter crackers, brown bread, milk and yeast, on the shortest notice and best terms. They employ twenty-one hands, and make to the value of fifty thousand dollars.

John Bailie, Front, above Ludlow street, has nineteen hands, and turns out, annually, forty-eight thousand dollars in value, prin-

cipally biscuit and pilot bread. His water crackers, especially, are known and appreciated at home and abroad. He works up, weekly, one hundred and ten barrels of extra superfine flour.

*Baking Powders.*—This is a branch of business introduced here within the last eight or ten years, which proposes to furnish a convenient, because portable article, as a substitute for yeast. The principal ingredients are carbonate of soda, and cream of tartar. The advantages over yeast are various:

1. As a dry powder, it can be kept in the original paper or cover, any required length of time, and in any climate, without loss of strength or change of character.

2. With its aid, bread, biscuit, etc., can be made of better flavor, and in less time than with any other materials of the sort, four minutes or less being the entire time necessary for preparation for baking.

3. The use of these powders affords a saving of one-third, in butter and eggs, while there is an excess in weight of bread, when they are used as an ingredient, of  $12\frac{1}{2}$  per cent. over what bread raised by yeast affords.

4. It can be used and kept in climates where yeast corrupts in a few hours.

H. Bishoprick & Co., No. 111 west Fifth street, manufacture this article largely—never less than one thousand pounds weekly—and sometimes as high as five hundred pounds daily being made at their factory. The article is put up in papers and cases of various sizes. Five hands now make as much as twelve did a few years ago.

These powders are shipped off to every business point south and west and east—to Boston, New York, Philadelphia and Baltimore; value of product, twenty-two thousand dollars. There are three minor establishments, which increase the amount 100 per cent.

*Band and Hat Boxes and Cases for Ladies' Shoes, etc.*—Six factories; one, working by steam. Employ thirty six hands; value of product, forty-two thousand dollars; raw material 50 per cent.

*Bee-Hives.*—Edward Townley, Mount Auburn, has been for years a successful raiser of bees and producer of honey. He is the patentee of a bee-hive, which, after all the various attempts to introduce others into this vicinity, appears to be the best adapted to bees, and their honey product. Ten hives, last spring, have this year increased to thirty, in his hands. Has sold six hundred dollars worth of honey, of this year's product. Hives with bees,

are sold by him at from ten to thirty dollars per hive, according to quality and condition of the bees. He has repeatedly made two hundred dollars from four hives, in a season.

*Bell and Brass Founders and Finishers.*—There are ten brass founderies and finishers, who do not make bells, and two in which bell founding forms the principal business. One of the ten makes steam and water gauges, in addition to the brass founding and finishing, and two others connect the plating business with their other operations. The entire value of product, in all these is—bells, one hundred thousand dollars; raw material, 70 per cent. Brass castings, finished, two hundred and twenty-five thousand dollars; raw material, 35 per cent; total product, three hundred and twenty-five thousand dollars, at an average of 45 per cent. cost of materials.

G. W. Coffin & Co., of the Buckeye Foundry, Second street near Broadway, have made during the past season, four hundred and forty-seven bells of all sizes, from a dinner alarm to the largest class of church bells, which have weighed four thousand and ninety-five pounds. The aggregate weight of these bells was forty thousand and seventy-six pounds. This is the only bell foundery in the United States, in which bells are constructed upon purely scientific principles, and made to conform rigidly to the laws of acoustics.

George L. Hanks, 120 and 122 east Second street, has cast, recently, for the most part, the chime of bells in St. Peter's Cathedral, weighing 12,000 lbs.; the city alarm bell, made to replace the bell from Troy, N. Y., condemned as unfit for use; three bells for St. Mary's Church, aggregate wt., 6,500 lbs.; three bells for Trinity Church, wt., 7,000 lbs; three bells for St. Augustine's Church, wt., 3,000 lbs; three bells for St. John's Church, wt., 4,300 lbs.; and one bell for St. Joseph's Church, wt., 2,000 lbs. These are some of the largest bells cast for city use. He has sent off to the south nearly five hundred bells per annum, of various sizes and for various cities, and is now manufacturing a bell of 2,800 lbs. for city, and another of 3,000 lbs. for Dayton, Ohio. Mr. Hanks manufactures, also, brass and composition castings extensively.

Wm. Kirkup & Son, No. 250 east Front street, opposite Little Miami Railroad depot, make steam and water gauges, locomotive spring balances, and signal bells, manufacture all kinds of copper,

brass, zinc, and composition castings. Finished brass work of all kinds constantly on hand.

They work twelve hands, and turn out a product of twenty thousand dollars. They supply steam and water gauges to steamboats and railroad engines throughout the west.

John Ruthven, No. 216 west Second street, between Plum and Western Row, manufactures all kinds of brass work in general use—for steam or gas purposes—keeps a large stock of gas cocks, of all sizes, on hand, with which he supplies the principal cities of the south and west. Brass castings made to order. Employs six hands, with a product of twelve thousand dollars; raw material, 50 per cent. Supplies service and metre cocks to the whole south and west.

Wm. Powell & Co., Union Brass Works, make every variety of brass and silver plated cocks, for plumbers' use; also, brass work for engine builders, distilleries, and breweries, such as stop cocks, still cocks, oil globes, gauge and cylinder cocks, etc.

Particular attention is paid to the manufacture of all such goods as are used by plumbers; and in this branch of manufacture the Union Brass Works of Cincinnati, is among the most extensive in the United States.

Powell & Co. are patentees and manufacturers of the elastic plug faucet, adapted to either cold or hot water, and which frost will not injure. They have been patented within six months past, are rapidly superseding all others, and will be put up throughout the new Masonic temple, and other public and private buildings now in process of erection, or to be built. One great feature of this article is its facility of being taken to pieces at once and put together again, without cutting it off the pipe, in case of any accidental injury occurring to the faucet.

James Hume, Lodge, between Sixth and Seventh streets, works twelve hands, and manufactures to the value of twenty-five thousand dollars, annually, of every variety of articles used by plumbers, gas fitters, coppersmiths, and machinists; raw material, 50 per cent. Old metal bought.

Clinton Robson & Co., brass founders, No. 154 Front, between Pike and Butler streets, manufacture stop cocks, bibb cocks, flange cocks, valve cocks, gauge cocks, cylinder cocks, oil cups, oil cocks, oil globes, couplings, poppet valves, hinge valves, slide valves, vacuum valves, steam shifter, steam whistles, spelter solder, bab-



bitt metal, brass pumps. Particular attention paid to distillery work, steamboat jobbing, etc. Brass and composition castings. Cash paid for old copper and brass. Work ten hands; value of product, twenty thousand dollars; raw material, 75 per cent.

Firth & McLean, brass founders and finishing shop, No. 29 Congress street, between Broadway and Ludlow, manufacture T. Firth's patent journal box metal, for railroad and rolling mill journals, and for bearings of all descriptions. Also, finished brass work of all kinds always on hand; such as stop, bibb, and valve cocks, couplings, etc.; also, all kinds of distillery work and composition castings made to order.

Smith, Fuller & Co., at the Niles' Works, east Front street, are engaged extensively in the manufacture of the patent elastic plug faucet, an invention of Mr. Fuller, a member of the firm, and a remarkable article, which, as it becomes generally known, must supersede all others now in use.

Its advantages are:

1. The simplicity of its principle and construction, which protects it from getting out of repair by use, and renders it easily repaired, when injured by accident.

2. Its durability, secured by the action of an elastic valve, which obviates all friction.

3. The impossibility, owing to its construction, of its ever leaking; and,

4. Its price, which, being as low as the best of the old-fashioned faucets, renders it much cheaper, taking into account the advantages just referred to.

Those who have experienced great disadvantage or loss in the stoppage of their business by leakage or filling up of sand or mud in faucets heretofore, can appreciate the superiority of this article. These elastic plug faucets have been thoroughly tested in both hot and cold water, by the fourteen months they have been in use.

They are made for a variety of purposes, and of every pattern—some of them quite ornamental, both brass and plated. This firm have received silver medals at the late exhibition of the Maryland Institute, Baltimore, and Franklin Institute, Philadelphia, and at the sixteenth exhibition of the Ohio Mechanics' Institute, Cincinnati.

*Bellows.*—Three small factories, which supply this market for home and foreign demand, with blacksmiths' bellows. They em-

ploy nine hands ; value of product, twenty thousand dollars ; raw material, 75 per cent.

*Belting.*—Two establishments ; eighteen hands ; yearly product, ninety-six thousand dollars.

James Thompson, No. 181 east Front street, manufactures, annually, seventy-five thousand dollars worth of belting ; employs twelve hands ; raw material, 75 per cent. Thompson uses the best of oak-tanned leather, from the tannery of A. M. Taylor & Co., of this city, which, for adaptedness to belts, by reason of its pliability and evenness, he considers superior to any he can get in other markets. His belting is thoroughly stretched, and well cemented and riveted.

Jeffery Seymour, No. 108 Main street, for many years a manufacturer here of belting and hose, keeps for sale belting and hydrant, engine and steam engine hose, made of vulcanized gutta percha, in every variety, of the best quality. These articles are made by the United States Vulcanized Gutta Percha Belting and Packing Company, of New York, for which Mr. S. is agent for the West.

In its crude state, gutta percha has no resemblance whatever to india rubber, nor are its chemical or mechanical properties the same, nor does the tree from which it is taken belong to the same family of trees, or grow in the same soil ; yet, from the fact that it can be dissolved and wrought into water-proof wares, many, not informed on the subject, have inclined to the belief that the two materials are identical, or very nearly the same. But nothing could be more erroneous, as may be seen by the following comparisons :

India rubber, or caoutchouc, is produced from a milk-white sap, taken chiefly from the *Siphonia Cahuchu* tree, afterward coagulated, and the whey pressed out or dried off by heat ; the residue is the india rubber of commerce.

Gutta percha is produced from the *Isonandra* or *Gutta* tree ; is of a brownish color, and when exposed to air soon solidifies, and forms the gutta percha of commerce.

India rubber of commerce is of a soft, gummy nature, not very tenacious and astonishingly elastic.

Gutta percha of commerce is a fibrous material, much resembling the inner coating of white-oak bark, is extremely tenacious, and without elasticity or much flexibility.

India rubber, when once reduced to a liquid state by heat, ap-

pears like tar, and is unfit for further manufacture until subjected to artificial changes.

Gutta percha may be melted and cooled any number of times without injury, for future manufacture.

India rubber, by coming in contact with oil, or other fatty substances, is soon decomposed and ruined for future use.

Gutta percha is not injured by coming in contact with oil or other fatty substances—in fact, one good use of it is for oil cans.

India rubber is soon ruined for future use, if brought in contact with sulphuric, muriatic, and other acids.

Gutta percha resists the action of sulphuric, muriatic, and nearly all other acids—in fact, one great use of it is for acid vats, etc., and other vessels for holding acids.

India rubber is a conductor of heat, cold, and electricity.

Gutta percha is a non-conductor of electricity, as well as of heat and cold.

India rubber, in its crude state, when exposed to the action of boiling water, increases in bulk, does not lose its elastic properties, and cannot be molded.

Gutta percha, in its crude state, when exposed to the action of boiling water, contracts and becomes soft like dough or paste, and may then be molded to any shape, which shape it will retain when cool.

India rubber is not a perfect repellant of water, but is more or less absorbent, according to quality.

Gutta percha has an exceedingly fine grain, and its oily property makes it a perfect repellant of liquids.

The foregoing comparative properties show conclusively, that india rubber and gutta percha are chemically and mechanically, as well as commercially, very different.

*Billiard Tables.*—There are two of these, both, comparatively, recent establishments; value of manufacture, three hundred and forty-two thousand dollars; employ one hundred and twenty-five hands; value of raw material, 80 per cent.

Holzhalb & Balke, northeast corner Main and Eighth streets, manufacture annually, six hundred of these tables. The framework is mahogany and rosewood, and the tops wood, slab, or marble. Price, from two hundred and twenty, to four hundred and twenty-five dollars. Employ fifty hands. They are agents, for the Western States, for M.M. Phelan's patent combination cushions.

J. M. Brunswick & Brothers, salesrooms and warehouse, No. 8 west Sixth street, manufacture annually, to the value of two hundred thousand dollars, of these tables. They work seventy-five hands, and furnish equipments of every article in this line. Their tables are of the first quality and finish.

*Blacking Paste.*—Three factories; one on a large scale. Value of product thirty-six thousand dollars; twenty-four hands; raw material, 50 per cent.

*Blacksmithing.*—One hundred and twenty-five shops; three hundred and forty-five hands; value of product, three hundred ninety-seven thousand two hundred dollars; raw material, 50 per cent.

*Blinds, Venetian.*—Seven shops, mostly on a small scale. They employ forty-five hands; product, sixty thousand dollars; raw material, 70 per cent.

S. B. Coombs, successor to J. McCord, No. 236 Vine street, makes venetian blinds of every variety of size and pattern. Also, window shades, buff-lines, and cambric curtain goods, wholesale and retail; works six hands, and makes blinds to the value of six thousand dollars, annually.

W. H. Hesseler, successor to Henry Read, No. 147 Sycamore, between Fourth and Fifth streets, west side, makes to order, as well as keeps for sale, venetian blinds of every description. Old blinds re-painted and re-trimmed, as may be required. Works ten hands; product, ten thousand dollars per annum.

W. W. Carpenter & Co., Phoenix Blind and Window Shade Factory, No. 82 Sixth, near Vine street, manufacture venetian blinds, of walnut, cedar, oak, and curled maple, with carved and gilded cornices, of various patterns and colors. Old blinds repaired and re-trimmed. Window shades of velvet, gold, and plain borders, landscapes, flowers, bouquets, etc. Church, store, and office shades; lettering, and designs for societies, emblematic and appropriate. Employ nine hands, and manufacture a value of ten thousand dollars.

*Blocks, Spars, and Pumps.*—Five shops, twenty hands; manufacture a value of twenty-five thousand dollars; raw material, 60 per cent.

*Boilers, Steam-engine.*—There are ten boiler yards, employing eighty hands; value of product, three hundred and sixty-three thousand dollars, inclusive of repairing operations; raw material, 70 per cent.



Washington McLean & Co., on Congress, east of Ludlow street, employ twenty hands, and manufacture and repair to the value of fifty-two thousand dollars.

*Bolts.*—For fastening and securing carriage, coach, pump, bridge, plow, water tank, joint, and machine work. Two workshops; employ sixty hands, and manufacture a value of sixty-five thousand dollars in this line; raw material, 40 per cent.

*Bookbinding.*—Thirty establishments, with three hundred and eighty hands. Of these binderies, a portion is connected with booksellers and stationers, in the blank book and pamphlet and job line—others again execute merely job work. Of these binderies several are branches of publishing houses and printing offices, of whose general business operations they form part, which makes it difficult properly to classify products in bookbinding establishments. The value of publishers' bindery work is, therefore, not included in this article, but will enter into the department of publications. The value of work strictly in this line, is three hundred and twenty-six thousand dollars; raw material, 50 per cent.

The paper used in bookbinding here, is made extensively in this vicinity. This applies as well to the blank book, as to its covers. And here it may be in place to correct a mistaken opinion, extensively prevalent, as to the superiority of linen as a basis of paper manufacture. As cotton itself is a modern product, comparatively, so the introduction of cotton rags, into the manufacture of paper, has been mainly of recent date. Linen rags alone, make a harsh, rough surface. Cotton rags, by themselves, do not possess the degree of firmness and tenacity desirable. A combination of the two, retaining the softness of cotton and the durability of the linen, has been ascertained to be best adapted to the purpose. All that is necessary beside, is seasoning, which is not more important for lumber than for paper, in the production of a first-rate article.

Another prejudice, on the subject of bookbinding, is the popular notion that sheep leather, as a material for covers, is inferior to calf.

Calf leather is almost always split, which impairs alike its natural strength and its beauty, while the tanning of sheep-skins has been brought to such perfection, as to render it the best material in the world for book covers.

Moore, Wilstach, Keys & Co., No. 25 west Fourth street, bind extensively for their own printing and publishing departments,

executing in the best manner, all varieties of work, from the plainest styles to the finest, in antique or Turkey morocco. They are, also, probably the heaviest manufacturers of blank books, having more extended facilities in single and double ruling and paging machines.

Their binding department occupies three large rooms, thirty-four by one hundred feet, heated by steam: much of the machinery is driven by the same power. Sixty to seventy-five hands are employed, and the product amounts, in value, to about seventy-five thousand dollars. A large stock of blank work, for the supply of dealers, county officers, etc., is kept constantly on hand.

The rapid development of our inland commerce by railway and river, as well as the accelerated growth of mercantile and manufacturing establishments, must necessarily create a demand for more intricate forms, and much larger quantities of account and record books than heretofore.

E. Morgan & Co., No. 111 Main street, employ eighty hands, men, girls, and boys. Yearly product, forty-five thousand dollars; raw material, 50 per cent.

The present volume, which has been bound at their bindery, is a fair proof that they can execute binding as well as their professional brethren in New York and Philadelphia.

W. B. Smith & Co., No. 137 Walnut street, keep fifteen hands on blank book work, of which they turn out a value of fifty thousand dollars. Their most important binding operations are school books, which they issue to a greater extent than any other book establishment in the United States.

Anderson, Gates & Wright, No. 112 Main street, bind blank books principally, and supply county records extensively; employ fifteen hands; value of product, twenty-five thousand dollars.

J. C. & W. L. Tamy, No. 43 Main street, employ forty-five hands, men and boys. Bind for Applegate & Co., principally blank books, etc., to the value of thirty-five thousand dollars; raw material, 75 per cent. on blank books; in other binding, 35 per cent.

The general stationery and printing and binding house of C. F. Bradley & Co., on Main street, just below Fourth, has been established now for some six or eight years, and is well known to the public. In the printing department, which gives constant employment to six job presses and fifteen hands, is carried on every variety of miscellaneous job printing; and as fine work, of this

character, has been executed at this establishment, as at any other place in the city. The binding and ruling department, which adjoins the printing rooms, is under the superintendence of Mr. W. P. Smith, and employs steadily about twenty-five hands; among whom are to be found some of the most experienced and capable workmen connected with this branch of trade. The business of this extensive and well-provided house, in these mechanical departments, is confined chiefly to job work, especially of the kinds required by railroad and insurance companies, manufacturing, and other business corporations, and the general mercantile transactions of the city; including the manufacturing of blank books, to which branch of the business particular attention is paid. In these three departments, the product reaches a value of sixty thousand dollars.

*Boots and Shoes.*—Of these, there are every variety made in Cincinnati; fine and coarse work for foreign markets, and custom work for home consumption. The purchases of our own citizens alone, annually, reach seven hundred and fifty thousand pairs of boots and shoes; worth more than two millions seven hundred and fifty thousand dollars. Two-thirds of these, at least, are made here, wholesale, or at custom shops. There are four hundred and seventy-four boot and shoemakers, with twenty-seven hundred and forty-five hands, and a product of seventeen hundred and fifty thousand four hundred and fifty dollars; value of raw material, 50 per cent., as an average.

When the statistics in this line, of the census of 1840, for Cincinnati were taken, although the value of the leather annually manufactured in the place was three hundred and thirty-five thousand dollars, yet, at that period, the entire consumption of leather here, was by custom-work boot and shoemakers, and the amount of raw material beyond that demand, was exported east, whence it came back, to a great extent, worked up into the cheaper qualities of ready-made boots and shoes.

Since that date, a beginning and successful progress has been made in changing this course of things, by various business houses, who have entered the field as wholesale boot and shoe manufacturers.

Of these, the principal are Charles Hendley, southeast corner Second and Sycamore streets, who makes men's boots and shoes only; Wm. H. King, and W. G. Rogers, on Pearl street, and Mark Tennison, on Western Row, who make men's and women's wear,

and E. G. Webster, No. 63 west Pearl street, and John H. Deters, southwest corner of Walnut and Fourth streets.

Webster & Co. is a large wholesale jobbing house in the boot and shoe line, and the only one in Cincinnati who manufactures here to any extent. They work one hundred hands—fifty men and as many women—and produce over seventy-five thousand pairs women's, misses', and children's boots and shoes annually; value, forty thousand dollars. They are also extensive dealers in eastern boots and shoes, for men's wear, their sales, in this last department, reaching one hundred and fifty thousand dollars yearly.

J. H. Deters, warehouse, in Carlisle's building, corner Fourth and Walnut, makes every description of boots and shoes—is exclusively a manufacturer, and sells his own products, wholesale and by retail; employs one hundred and fifty hands, and produces, annually, a value of one hundred and thirty thousand dollars.

*Box Factories.*—There are six packing-box factories, which employ seventy-five hands; value of product, two hundred and ten thousand dollars; of raw material, 40 per cent.

J. & J. M. Johnston, 219 and 221 west Third street, make packing-boxes, bath tubs, and refrigerators; employ forty-five hands, and produce to the value of one hundred and twenty thousand dollars. They make, annually, three hundred thousand boxes, of every size and description, and work up two millions five hundred thousand feet of boards as material.

*Brands, Stamps, Stencil Cutting, etc.*—Ten shops; thirty hands; product, twenty-two thousand dollars; raw material, 10 per cent.

John Stanton, No. 139 west Fifth street, west of Race, cuts steel alphabets and figures of all sizes and patterns; stenographic characters, etc. Also, railroad, steamboat, and hotel baggage checks, which can be ordered by mail and will be forwarded by express to any part of the country. Four hands, yearly, produce four thousand dollars.

*Bricklayers and Plasterers.*—Two hundred and ninety bricklayers, and forty plasterers—master workmen. Eleven hundred and twelve hands; labor value, six hundred and forty thousand seven hundred dollars; raw material, 10 per cent.

*Brickyards.*—Sixty brickmakers; employ five hundred hands; value of product, two hundred and eighty-five thousand dollars; raw material—clay and fuel—45 per cent.

*Brooms.*—Two shops, one small.



Conklin & Bacon, corner Front and Walnut streets, manufacturers of brooms, and dealers in produce and broom corn, work twenty-five hands; product, in brooms, twenty-five thousand dollars; raw material, 60 per cent.

The broom corn is raised throughout the west, and supplies reach this market from points as far off as western Illinois. It varies, in price, according to quality or scarcity, from sixty to one hundred dollars per ton. Average crop is two-thirds of a ton to the acre. They make three hundred and fifty dozen per week, which range, in price, from one dollar and a quarter, to three dollars per dozen. Their handles are supplied from the valley of the Kanawha, Virginia. The West is the principal market for the article. The largest share of the brooms is made at various points, contiguous to where the broom corn grows, in many cases upon the farms themselves.

*Bristle Dressing and Curled Hair Manufacture.*—In the list of a variety of operations here insignificant in their details, but of some importance in the aggregate, may be included the business of bristle dressing, or preparing the bristle and hair of our great staple, the hog, for eastern markets. This is carried on, in this place, at two establishments, Whittaker and Bullock's, and gives occupation to one hundred and fifty hands, whose labors it engages during a part of the year, affording higher wages, or rather, netting to the laborer more profits than almost any other journeyman employment in Cincinnati. These bristles are sent to our eastern cities, where they are assorted for various uses.

These firms have prepared for market, this season, the supplies, in these articles, which have been yielded by the three hundred and sixty-five thousand hogs sold this year in this city. Each hog yields three-quarters to one pound of bristles; value of bristles and hair, one hundred and forty thousand dollars. This is six-fold the value of sales in 1840, and three-fold that of sales in 1850.

This appears a small business, but it becomes of interest for several reasons. It is, in the first place, a fair specimen of a variety of petty operations here, whose aggregate of value, in export, is more than three millions of dollars, but whose importance is further enhanced by the fact, that nearly the entire value is conferred on it by labor.—In this particular employment, as in the manufacture of hoofs, refuse bones, etc., of hogs, an advantage is afforded to this city which has built it up into the great hog market

of the west.—The manufacture for foreign consumption of bristles and prussiate of potash and other articles made of hog offal, enables the pork-packer to give seven to ten per cent. more for hogs here, than is given elsewhere at points where the purchaser is not prepared to save or use up these materials.

*Britannia Ware.*—Two factories; product, one hundred thousand dollars; employ forty hands; raw material, 40 per cent.

H. Homan & Co., manufacturers of britannia ware, and Willis Humiston's patent candle mould machine, dealers in block tin, antimony, and tinner's solder, No. 11 east Seventh street, between Main and Sycamore, north side, Cincinnati, O. Candle moulds made to order. Homan & Co. employ twenty-eight hands; value of their products eighty-five thousand dollars.

*Brushes.*—Of these there are fifteen factories, all small, but one or two; aggregate product one hundred and twenty-five thousand dollars; employ eighty-five hands; raw material 40 per cent.

W. D. Mintzer, south east corner of Walnut and Fifth streets, works sixty hands, men and boys, with a product of one hundred thousand dollars. Manufactures patent paint brushes and sash tools, coach varnishing and nailed white-wash brushes, street-cleaning brooms, which are made of sea weed from the South Sea Islands, etc.

Most of his brushes for fine work are imported. Mintzer claims, by a process peculiar to himself, to straighten out bristles so that they never curl, but preserve a chisel edge to the last.

*Building Materials.*—S. C. Salisbury, No. 6 Burnet House Buildings, has invented a machine which he terms the building and architectural reformer, which he considers destined to produce a great revolution in architectural designs as well as to add great density and durability to building materials. Clay is taken direct from the bank in its crude damp state, and without any preparation is thrown into the hopper of this machine, where it passes through a series of kneading and working until every particle becomes thoroughly mixed and the fibres united together like those of wax or putty; and as fast as it becomes so prepared, is constantly being forced along through the forming dies, where it is forced and pressed into all the various shapes, such as brick-pipe of all kinds, cornices, grooved and matched blocks, etc., under a revolving forcing pressure of upward of *two hundred tons per square inch*. All that has to be done to produce any of the

various articles, is merely changing the *dies*. And with slight alterations in construction, the same machine will manufacture lead or gutta percha pipe at one-half the present cost, by any machine ever put in practical use, and much more accurately than has ever been yet done, as a perfect even density is obtained in whatever is produced; which is one of the greatest advantages it has over all former attempts at building materials, and a composition is thus obtained that will render these unburnt building blocks perfectly impervious to our dampness or water, and which is almost equal to stone in its density, and bears nearly the pressure of stone. This community has long needed cheap sewerage and drainage pipe, and this machine will be the means of a general introduction of such articles. It works all kinds of clay as well as all other plastic materials; yet the tougher the clay the better the finish and perfection of its product.

*Bungs and Plugs.*—One factory; works two machines, driven by steam power. The plugs are punched out at the rate of six thousand per hour, and the bungs can be turned, by adjusting the machine, to any requisite size. Sales, annually, seven hundred barrels; value of six thousand dollars. A large proportion is sent east; raw material, 30 per cent.

*Burning Fluid.*—This is a combination of whisky, or rather, alcohol and camphene, which is a re-distillation of spirits of turpentine, and is the cheapest material of artificial light. Much prejudice exists, in the minds of many, against using this article, on account of the many casualties resulting from its use. All these are, however, from ignorance or carelessness in pouring the fluid into lamps, the wicks of which are lighted. Fluid oil lamps ought invariably to be filled up in the morning, when they are put away after previous use, and with this precaution no accident can take place. Three establishments, employing twenty hands, and producing a value of one hundred and ninety-five thousand dollars; raw material, 50 per cent. It is the estimate of persons qualified to judge, that the amount of whisky affording a material for light, is greater than that consumed as a beverage.

E. P. Starr, No. 165 Walnut street, is extensively engaged in the manufacture and sale not only of burning fluid, but of phosgene and burning fluid lamps of every variety in pattern and size. Mr. S. was the pioneer here, in the product of burning fluid, having

been in this line of business for the past ten years. His manufactory is on Second, west of Plum street.

*Butchers.*—Two hundred and ten, who occupy six market houses, beside one hundred and ninety more who keep meat shops. Eleven hundred hands. The value of pork, beef, mutton, etc., cut up and sold to families, public houses, steamboats, and delivered in the vicinity of the city, reaches four millions three hundred and seventy thousand dollars; raw material, 80 per cent.

One hundred and seventy-five head of cattle alone, are slaughtered daily for this market.

*Candles.*—Star, adamantine, opal, tallow—lard oil, red and tallow oil, soap, glycerine, etc. There are twenty-five manufactories here, in which one or more of these articles is made, and mostly on a large scale. Three of the entire number make glycerine, and as many more tallow, oil, and fancy soaps. Eight manufacture tallow candles, and seven oleine, palm oil, soda, and German soap. Eleven are engaged making red oil, and the same number tallow candles. Thirteen make star, adamantine, or opal candles, and nineteen produce lard oil.

This aggregate forms our heaviest manufacturing department, except that of clothing, which it, however, exceeds in importance, the raw material, in these articles, being entirely of home growth.

Lard, as is well known, is separated, by compression, into oil and stearin. Stearin, when saponified and pressed, yields red oil, and the residue, which is stearic acid, is the material for star and adamantine candles. The compression of tallow, yields tallow oil, which enters largely into the composition of fancy soaps, and is entirely consumed in that manufacture. The tallow, thus divested of oil, becomes the material of which summer candles are made. Red oil, with soda ash, and rosin, forms the ordinary soap; oleine and soda, German, etc. Glycerine is made from the waste of lard, or residuum left of that article in these various manufacturing processes. It is an article of recent application to general purposes, having been known and used to but a limited extent for years past, owing to the expensive materials and processes employed heretofore in its manufacture. But modern chemistry, the great necromancer of the age, has brought this valuable substance to light, from hitherto hidden recesses, and converted the dregs and discolorations of the lard kettles into a transparent syrup, equally delightful to the eye and to the taste, and by increasing



the product, and diminishing the expense of its manufacture, glycerine will now become a substitute for many articles which it supersedes to advantage.

It is already prescribed by the faculty in place of cod liver oil, being equally serviceable and far more palatable, for invalids of consumptive habits. It proves a valuable aid in surgical practice, and in the treatment of wounds; is applicable to the relief of burns, rheumatism, sore throat, and ear diseases. It is also the best remedy known for chapping of the lips or of the hands.

It is superior to molasses, in making up printers' rollers, which it keeps constantly flexible and yielding, and when incorporated with the material of printing paper, it obviates the wetting down process, and renders the paper soft and pliable for immediate use, at any future time.

It is an excellent ingredient in paste blacking, and a valuable adjunct to copying-ink. Most of its applicability to these purposes, consists in its properties of resisting the drying influence of the atmosphere, by which it is less affected than any other known substance. In fact, there seems to be no more limit to the variety of its uses, than in those of gutta percha.

Hitherto, we have been depending upon London druggists for this valuable article, for which so high a price has been demanded, that it could not be retailed in the United States for less than one dollar and fifty cents per pound. It can now be supplied to the consumer at half that price, and as we obtain glycerine from lard, while the foreign article is extracted from palm oil, the home article excels the imported in the degree that animal extracts are stronger than the corresponding vegetable article.

If it should be asked, after all, what is glycerine, the reply may be made—it is the saccharine principle in oil—in pure English—the sugar of fat.

It is but a few years since that wood ashes were extensively bought for soap making; at present, they are worth nothing, for that purpose, being superseded entirely by soda ash.

The largest share of our lard and tallow reaches here from various points south and west, and as long as these two products find, as they now do, their best market here, it becomes of little importance to us that we should maintain our ascendancy in the meat department of the hog and beef market.

The value of products, in this line, is:

|                                      |           |             |
|--------------------------------------|-----------|-------------|
| 242,000 boxes star candles, at       | \$8, - -  | \$1,936,000 |
| 64,000 " tallow "                    | 5½, -     | 352,000     |
| 157,500 " soad,                      | 4, - -    | 630,000     |
| Fancy toilet and shaving soap, - - - | - - -     | 75,000      |
| 70,000 bbls. lard oil, at            | 36, - -   | 2,520,000   |
| 3,000 " tallow oil, at               | 29, - -   | 81,000      |
| 14,000 " red oil, at                 | 22, - -   | 308,000     |
| Glycerine, - - - - -                 | - - - - - | 212,500     |
|                                      |           | \$6,114,500 |

These products, which, it will be seen, do not include our pork and beef preparations, exceed in value the *entire* hog and beef product of 1851; raw material, 75 per cent.

Proctor & Gamble, factory, No. 830 and 832 Western Row, warehouse, 24 west Second street, are probably engaged more extensively in manufacturing operations, than any other establishment in our city. They consume seven hundred barrels rosin, and three hundred tons soda ash; ten thousand carboys—or six hundred thousand pounds—sulphuric acid; one hundred and fifteen thousand pounds candle-wick, and thirty thousand barrels, of two hundred and fifty pounds each—or seven million five hundred thousand pounds—lard, annually, in their various products.

Their sales have largely exceeded one million dollars yearly; and in consequence of the high price of the great staple, lard, will this year, doubtless, reach much higher figures than heretofore. They employ eighty hands, in the various departments of their business.

Peebles & Brother, No. 179 and 184 west Canal street, between Elm and Plum, manufacture lard oil, red and tallow oils, star, opal, stearin, and tallow candles and soap. This firm are the sole manufacturers, in this city, of opal candles. They employ twenty-seven hands, with a yearly product in value, of three articles, of one hundred and ninety-five thousand dollars; raw material, 80 per cent.

The opal candle is produced from lard stearin, and is a handsomer, and at the same time, a lower-priced article than the star candle; requires thrice the time to prepare it for market, and the yield of lard for opal, is much less than to star candles. Most

candlemakers, therefore, direct their operations to the last named article, in preference.

An opal candle is so transparent, when newly made and held up to the light, as to exhibit the wick in the centre as distinctly as if it were passed through a glass tube. If it had the property, like sperm or star candles, of consuming its own snuff, it would be the most popular of all candles. As it is, there is a ready demand for all that this firm are prepared to make.

It has been already stated that lard, by pressure, separates into lard oil and stearin. The stearin, under Peeble & Bro.'s process, yields opal candles and slush stearin—which last, saponified by lime and decomposed by sulphuric acid, produces star candles, red oil and glycerine. The red oil is the basis of the ordinary soaps. One million pounds lard, and three hundred thousand pounds of stearin added thereto, produce—five hundred thousand pounds of lard oil; three hundred thousand pounds opal candles; two hundred thousand pounds star candles, and three hundred thousand pounds of soap. The loss and waste of lard, in this manufacture, being equal in weight to the soda ash which enters into the soap—so that product and raw material are alike, in point of weight.

F. W. Meyer & Co., at the Buckeye Lard Oil Works, No. 15 Buckeye street, manufacture lard oil and star candles—Office, No. 31 Main street, employ thirty-five hands in their factory, produce six thousand barrels lard oil, and twenty-five thousand five hundred boxes star candles annually. Value of products, four hundred and fifty-eight thousand two hundred and fifty dollars.

*Candy Factories*—Of which there are thirteen, several of which are on a small scale. They employ one hundred and thirty-two hands, and make confectioneries and candies to the value of two hundred and sixty-two thousand dollars; raw material, 60 per cent.

E. Myers & Co., No. 52 Main street, consumed last year, sugar to the value of fifteen thousand one hundred and fifty dollars. Employ six men, seven boys, seventeen girls, and produces a value of thirty-six thousand dollars.

Myers & Co., No. 40 Main street, employ twenty-four hands; product, fifty thousand dollars.

These two establishments are owned by the sons of John Myers, the oldest confectioner in this city, who has retired from business, and resides in the country.

*Cap and Hat Body Factories.*—Of the latter there are two, who furnish bodies for the cheap hats finished up in cap factories. They make a value of twenty thousand dollars. Of these cap manufacturers there are seven, all wholesale. They produce a value of one hundred and twenty thousand dollars, and employ one hundred and sixty hands; raw material 50 per cent.

*Carpenters and Builders.*—Three hundred and ten shops. Employ two thousand four hundred and twenty-four hands. Value of products, two millions seven hundred and sixty thousand dollars; raw material, 5 per cent.

*Carpet Weavers*—Fifteen shops, seventy hands; seventy-five thousand dollars product; raw material, 40 per cent.

*Carpenters' Tools.*—Charles G. Siewers, cabinet, joiner and mechanics' saw and tool factory, Eighth street, east of Broadway, manufactures and keeps constantly for sale, try squares, slide bevels, mortice guages, spirit levels, billet, web, buck, cooper's, butchers', machine, felloe and turners' saws, coach tools, etc. Employs ten hands, and manufactures to the value of eight thousand dollars annually.

*Carriages, Buggies, Omnibuses, Spring Wagons, etc.*—Thirty-two factories, four hundred and fifty hands. Value of product, four hundred and sixty thousand dollars; raw material, 70 per cent.

I. & B. Bruce, salesrooms south-east corner of Third and Vine street; factory at the intersection of Second and Elm, and occupying a front on both streets; manufacture every variety of wheeled vehicles, including carriages, buggies, barouches, omnibuses, hose reels and spring wagons. They employ ninety to one hundred hands, with a product of one hundred thousand dollars. This firm carries on the largest manufacturing and repairing business in this line in Cincinnati.

B. R. Stevens, No. 55 and 57 Fifth street, between Sycamore and Broadway, south side; coach and carriage maker, keeps constantly on hand a large assortment of carriages of his own manufacture, which he will warrant and sell low for cash. Orders received for all kinds of carriages, and promptly executed. Also, repairing done on the shortest notice, and at the most reasonable rates. Employs thirty-five hands, and manufactures and repairs to the annual value of forty thousand dollars.



*Carvers—Wood.*—Four shops, twenty hands; value of product, thirty thousand dollars; raw material, 5 per cent.

Henry L. Fry, architectural carver and designer, north-west corner Sixth and Western Row, executes Corinthian, Ionic and other capitals, brackets and every kind of ornament furnished in wood, iron, etc. Ornamental pattern work designed and made in superior style. All the fine and elaborate carving in our best buildings, public and private, has been executed by Mr. Fry. The Central Presbyterian Church, Carlisle building, Pike's opera house, and Messrs. Dexter, Este and Worthington's splendid mansion houses bear abundant testimony to the skill and taste of Mr. F., in their architectural designs and carved work.

*Charcoal Pulverizers.*—Three establishments, eighteen hands; product, thirty thousand dollars; raw material, 50 per cent.

*Cistern Builders.*—Three, employ thirty hands; value of product, seventy-five thousand dollars.

*Chemicals.*—Eight laboratories and factories, which make sulphuric, nitric and muriatic acids, ether, prussiate of potash, prussian blue, glycerine, and a variety of modern chemical and pharmaceutical preparations and extracts.

Harwood & Marsh, Hamilton Road, west of Elm street, and Eugene Grasselli, on Front street, east of the Little Miami Railroad Depot, have laboratories constructed on the large and expensive scale required in their line of business. The value and amount of their products are nearly equal. They make, annually, twenty-four thousand carboys of one hundred and sixty lbs. each, or three millions eight hundred and fifty thousand lbs. nitric and muriatic acid. They have the capacity of manufacturing twice these quantities. Grasselli makes other chemicals to a minor extent. They each employ thirty hands, who work day and night, in relief parties. Value of product, four hundred thousand dollars.

I. C. Baum, Plum street, below the Mohawk bridge, over the Miami canal, makes prussian blue and prussiate of potash, works fifteen hands, employs hydraulic power, and uses cracklings mainly as his raw material. This is the only establishment in the United States, if not in the world, in which machinery is applied to this manufacture. Produces sixty thousand lbs. prussiate of potash; value, twenty-five thousand dollars.

Proctor & Gamble have recently commenced the manufacturing of glycerine, and expect to make two hundred and fifty lbs. per day.

F. W. Meyer & Co., at their Buckeye lard oil works, No. 15 Buckeye street, also make glycerine to the extent already of one hundred and twenty-four lbs. per day, a quantity they expect soon greatly to increase. These glycerines are made under the agency of J. F. Wisnewski, a practical and thoroughly educated chemist, who produces a purer article than can be obtained in any of the foreign markets. The London glycerine is made from palm oil, ours from lard, which is a better material in the degree of strength that the animal surpasses the vegetable basis. In a few years Cincinnati will become the great centre of production of glycerine for foreign as well as domestic markets.

Wm. J. M. Gordon & Brother, chemists and druggists, north-east corner Western Row and Eighth streets, who have been for several years past supplying of their own manufacture various rare and new chemical and pharmaceutical preparations of a quality and purity which has won the confidence of professional men, have been compelled by the enlarging character of this branch of their business, to erect a laboratory by which they might be enabled to carry it on to increased advantage, and successfully compete with eastern and foreign establishments. Here are manufactured chemical and pharmaceutical preparations of all kinds, reliable for purity as well as accuracy in their components for medical or other uses; also, photographic, and analytical chemicals, extracts and other concentrated principles of vegetable substances. For the purpose of manufacturing to the best advantage, and obtaining reliable products, they have fitted up vacuum pans for the concentration of their vegetable preparations.

It is obvious that advantages for carrying on these operations exist in Cincinnati that can be found at no point eastward, or in any foreign market, owing to the fact that alcohol and the native vegetable substances are nowhere to be procured as cheaply as here. They anticipate supplying chemical and pharmaceutical preparations, from syrups, ointments and plasters, to the finest vegetable alkaloid and the rarest chemical compounds. With its local advantages, their manufactory will doubtless be, in a few years, one of the most extensive in the country.

W. J. M. Gordon, the senior of the firm, has been for twenty years past engaged in the study and pursuits of chemistry and pharmacy, and brings to the business a large share of experience,

as well as a naturally sound judgment, which has inspired past, and will inspire future confidence in a high degree.

*Cloaks, Mantillas, etc.*—There are five establishments which manufacture largely of these articles. They employ two hundred and forty girls, working nine months of the year, for spring and fall sales, and produce a value of two hundred and eighty thousand dollars. The smaller factories in this line will swell this amount to four hundred and fifty thousand dollars; raw material, 50 per cent.

*Clothing Manufactories.*—This is the largest business carried on in Cincinnati, comprehending, as it does, forty-eight wholesale, and eighty-six retail establishments. It gives employment to seven thousand and eighty seamstresses, who use ten hundred and sixteen sewing machines, besides seven thousand five hundred more, who sew by hand. Every year, by increasing the use of sewing machines, will lessen the proportion of hand sewing, and add to that by the machine. Value of product, fifteen millions dollars. Six of the heaviest of these shops, or stores, alone make up four millions in value of clothing; raw material, 60 per cent. Cincinnati is the largest market for ready made clothing in the country, east or west.

*Coffee Roasting and Grinding, Spice Mills, etc.*—Two establishments in this line. Harrison & Wilson, successors to Harrison & Eaton, Nos. 99 and 101 Walnut street, and Geo. R. Dixon & Co., Nos. 243 and 245 Sycamore. The first named is the longest established house, but there is no great difference in the character, and amount of business done in these factories. They roast and grind coffee for the grocery trade, and grind mustard, pepper, allspice, cinnamon, cloves, ginger, etc. Make baking powders, and roast peanuts, all on an extensive scale. Employ forty-five hands, and produce a value of two hundred and twenty-five thousand dollars.

*Cooper Ware.*—There are one hundred and thirty shops, with seventeen hundred and fifty-six work hands. Value of production, one million five hundred and ten thousand dollars; raw material, 30 per cent. A large share of this enlargement of cooper business during the past eight years has been furnished by the increase in breweries and of lager beer, which, besides requiring large numbers of casks in its sales, demands an extensive stock of vessels in which it is kept to ripen after being made. Of this last

class of casks, the Cincinnati brewers are obliged to keep a stock on hand of more than six hundred thousand dollars in value.

In barrels and hogsheads for pork and bacon packers, one establishment alone works one hundred hands, and produces to the value of one hundred and twenty thousand dollars yearly.

*Copper, Tin and Sheet Iron Workers.*—One hundred and fifteen shops; seven hundred and sixty hands; value of products, six hundred and ten thousand dollars. Of raw material, 60 per cent., tin and sheet iron ware, 30 per cent.; average value of raw material, 48 per cent.

G. A. Shaddinger, 123 and 125 east Pearl street, manufactures engine and distillery work, pumps of all kinds, and every description of work belonging to either alcohol or whisky distilleries; alcohol stills, columns, etc. Works twenty-eight hands, and produces a value of forty-eight thousand dollars; raw material, 60 per cent.

*Copper and Steel Plate Engravers and Printers.*—Two establishments, employ twenty-two hands; labor product, forty-eight thousand dollars; raw material, 10 per cent.

*Cordage, Hemp, Manilla, etc.*—Six factories, one hundred and forty hands, with a product of two hundred and thirty-four thousand dollars; raw material, 40 per cent.

Kennett, Dudley & Co., manufacturers of machine bale rope, will turn out during this year, seventy-six thousand lbs. of baling rope; work four men and twenty boys; value of product, sixty-five thousand five hundred and twenty dollars.

*Cotton Yarn, Batting, Candle-Wick, Cordage, Twine, etc.*—Five establishments, employ five hundred and eighty hands, and produce a value of six hundred thousand dollars; raw material, 70 per cent.

Covington Cotton Factory, R. Buchanan & Son, 26 east Front street, agents, manufacture three hundred and fifty thousand lbs. yarn, besides largely of candle-wick, carpet warp, batting and twine.

Gould, Pearce & Co., manufacturers of star and chandlers' candle-wick, twine, cotton cordage, carpet warp, coverlet yarn, calking, batting, etc.; also of Pearce's plantation spinning machines. Factory, corner Fifth and Lock streets, on the Miami canal; store and office, No. 48 Walnut street. Gould, Pearce & Co., manufacture two thousand bales of cotton per annum, into cotton cordage,



different varieties of star and chandlers' wick, twine, batting, carpet warp, etc., etc.; also, plantation spinning machines, work four thousand spindles, besides batting, machinery, and machine shop; use steam and water power, about sixty horse power. Value of product, one hundred and fifty thousand dollars.

Gould & Wells, dealers in cotton and cotton goods, manufacturers of cotton cordage, seamless bags, twine, yarns, colored and white carpet warp, coverlet yarn, candle wick, batting, etc. Factory at Wellsburg, Va.; office, 48 Walnut street, between Front and Second streets. Employ one hundred and twenty hands, and manufacture a value of one hundred and twenty-five thousand dollars.

Franklin Cotton Factory, Harkness, Strader & Fosdick, corner Third and Smith. Number of hands, two hundred and thirty. Cotton used per annum, seventeen hundred bales, manufactured into coarse sheetings, No. 14 yarn. They turn out two millions two hundred and fifty thousand yards; use about sixty thousand bushels of coal; and three hundred and twenty-five barrels of flour annually.

*Cured Beef, Tongues, Etc.*—Fourteen establishments, one half of which are on a small scale. One million seven hundred and eighty thousand lbs. beef, and sixty-three thousand tongues are the product of this business, in value two hundred twenty-five thousand five hundred dollars. Employ three hundred hands; raw material, 62 per cent.

*Cutlery, Surgical and Dental Instruments, Tailors' Shears, etc.*—Ten workshops and depots, fifty hands: value of product, eighty thousand dollars; raw material, 20 per cent.

John Luther, manufacturer of tailors' shears, scissors, sheep-shears, knives, pruners' shears and knives, and almost every kind of cutlery, No. 16 Fifth street, north side, between Main and Sycamore streets. Shears, sheep-shears, scissors, razors and knives ground in the best manner and at the shortest notice. Employs ten hands with a product of nine thousand dollars.

*Dental Furniture.*—One shop, which makes every article required for the equipment of a dental establishment; employs nine hands, with a product of ten thousand dollars.

*Dentistry.*—There are forty dentists, with as many more engaged as assistants. The value of dental operations here, annually, will reach to one hundred and twenty-five thousand dollars.

Five alone of these establishments do a business of forty thousand dollars of the amount. The delicacy and accuracy of first rate operations here are not surpassed in the United States. It is not necessary to include Europe, as it is a conceded point that the best operations in the world are executed in this country. All the principal dentists in Paris are Americans; and the family dentist of the last sovereign of France had removed to Paris from this city. Among the most thoroughly qualified in this line of business here are Drs. Taylor & Irwin, and Taft & Roudebush, both resident on Fourth street, west of Walnut, and Drs. Hamlin & Smith, opposite the First Presbyterian Church, Fourth street, west of Main street.

*Die Sinkers.*—Three shops, six hands; value of product, seven thousand five hundred dollars; raw material, 10 per cent.

*Drain Pipe, Stone.*—The article of drain pipe is now being extensively used in the city and vicinity. The best pipe for purposes of drainage is brought from northern Ohio. The clay in our limestone region not being suited for making this article. A. W. Gilbert, 200 Vine street, has a variety of kinds. The glazed stoneware pipe is a superior article, the inside surface being glazed so as to present quite a high polish. Keeps every size, from one and a quarter to eighteen inches. It is being much used by our builders for soil pipes, and for conveying water from the spouts of houses to cisterns.

*Drugs.*—Two drug grinding establishments; employ twelve hands, and produce a value of sixty thousand dollars annually; raw material, 50 per cent.

J. C. Shroyer, Phoenix Steam Drug and Spice Mills, 17, 19 and 21 Home street, grinds mustard and spices of all kinds. Also manufactures marble dust for mineral water factories, of which he turns out six hundred barrels yearly. Makes more of this last article than any other establishment in the West. He also grinds or powders every species of drugs to order, and prepares concentrated extracts of vegetable medical articles, such as podophyllin or mandrake, sanguinarin or blood-root, macrotin or black cohosh, leptandrin or black-root extracts.

These articles are so highly concentrated by chemical processes, that the active principle of an article worth not more than ten or fifteen cents the pound, acquires a value of one dollar per ounce.

These preparations are sent out the whole length and breadth of the United States, and even into Canada.

The vegetables whose roots furnish these extracts are indigenous to the West, abounding especially in Indiana and Missouri.

This is a rapidly growing establishment, whose operations must become in a few years very extensive ; value of products, twenty thousand dollars.

*Dyeing.*—Fifteen dye and scouring establishments, forty-five hands ; value of work done, sixty thousand dollars ; raw material, 25 per cent.

Wm. Teasdale, New York Dye House, Walnut street, west side, between Sixth and Seventh. Dyeing, scouring, steam finishing, etc., etc. Particular attention will be given to cleaning white crape, broche and printed shawls. Also, damask curtains, carpets, rugs, druggets, etc., etc. Orders from the country promptly attended to.

Mr. Teasdale carries on an extensive business in this line. He has invariably received premiums and diplomas at the respective State exhibitions and mechanics' fairs, when competing with other dyers.

*Edge Tool Making and Grinding.*—Nineteen factories, principally on a small scale. Seventy-two hands ; value of products, one hundred and thirty thousand dollars ; raw material, 35 per cent.

A visit to the workshop of A. Cunningham, on Eighth, near Main street, will deeply interest a judge of edge tools. Here are made every variety in this line, of a pattern and finish scarcely to be found elsewhere. Such as coopers', carpenters', and wagon makers' draw knives ; foot, gutter, ship and coopers' adzes ; socket chisels and drivers, millwright and corner chisels ; coopers' and carpenters' broad axes ; hand, ship and chopping axes ; froes, hatchets, pump and spout augers ; tanners' and fleshers' knives ; pork and ham cleavers ; plane bits, stone hammers, post-hole augers, railroad tools of all descriptions, machine knives of all sorts ; also, grinds edge tools. There are specimens of work here, especially of currying knives, which cannot be surpassed, if equaled, anywhere. Cunningham works sixteen hands, with a product of twenty thousand dollars.

*Engraving, Seal Presses, etc.*—Eight establishments, employ twenty hands, product thirty thousand dollars.

C. F. Hall, 14 west Fourth street, engraver. State, court, no-

tarial, lodge and other seals ; makes lever and percussion presses. Twelve highest premiums and diplomas have been awarded him within the last two years, by various State, county and mechanics' fairs. Value of product, fifteen thousand dollars.

The establishment of P. Evens, Jr., 187 Walnut street, and his different agencies in Cincinnati, has supplied the great majority of seals and presses used in the United States, Havana and Canada. His work rooms are of great completeness. Every part of the seal presses has a distinct machine or tool for its manufacture. The lettering and designs of seals are elegantly engraved by labor-saving tools, everything requisite having been provided to cheapen and improve this article of merchandise. Mr. Evens' order book exhibits more than thirty thousand seal impressions, such as *State, notary, lodge, court, society* and *business seals*, and no two alike, ordered from every city and village in the country, and many from Europe. All the principal seal engravers of this and other cities are supplied by him with press and seal complete.

Mr. Evens, in connection with the above, manufactures *sewing machines, models for patents*, and every variety of *light machinery*.

*Engraving, wood*—Twelve establishments ; value of work, seventy-five thousand dollars ; raw material, 10 per cent.

Stillman & Crump, No. 8 Carlisle building, employ twelve engravers, and produce a value of twenty thousand dollars. Mr. Stillman, of this firm, has been long known and appreciated professionally, and the present firm maintains the reputation of the past for first class performances. They employ machinery in the execution of certain parts of their operations, which, of course, insures accuracy more perfectly than can be obtained by the hand aided by the eye, while they bring the highest skill into service, for the artistic residue. This facility enables them to execute orders upon short notice and with unexampled rapidity. A number of the engravings in this volume, it may be seen, were executed at their office.

*Files*.—Two factories, in which rasps and files are cut in the very best style. They employ nineteen hands ; value of product, eighteen thousand dollars ; raw material, 50 per cent. These establishments import their own steel from Sheffield, England.

*Florists, Nurserymen and Seed Dealers*.—A large amount of plants, etc., are disposed of in this market. Strawberry plants by the million or more can be readily filled in the proper season, on



orders. There are twenty-five sale gardens and depositories here, whose sales annually reach three hundred thousand dollars. Among the best of these establishments are those of

M. Kelly, Clifton nursery. Sale flower garden, shade and fruit tree nursery. Occupies fifty acres in four separate lots in this vicinity, the principal one of which is in Clifton on the bank of the Miami canal, two miles from Cincinnati. This has been occupied and under fine improvement for the past twelve years. The ground slopes handsomely to the west and south, mainly to the west, and the flower and shrubbery garden in the season of vegetation makes a charming appearance. His extensive and varied catalogue composes everything that a lover of flowers or fruit could desire. The choicest and newest varieties, as well as the old standard favorites, are sure to be found at this establishment.

D. M'Avoy, Fifth street, near the Dennison House, is prepared to furnish at shortest notice, in the proper season, all the popular and standard trees, shrubbery of every description, gooseberry, strawberry and currant bushes of all varieties, and the best quality, asparagus roots, grape vine roots and cuttings, ornamental trees and green house plants, etc.

Wm. Heaven, proprietor of the Reading Road Nursery. Fruit and ornamental trees, shrubs and plants; bouquets at all seasons. Orders through the post office, or left at Suire, Eckstein & Co.'s, Fourth street, promptly attended to. Employs twelve hands in the cultivation of about fifty acres; annual sales, fifteen thousand dollars.

S. W. Haseltine has recently opened, at No. 171 Walnut street, opposite the Cincinnati College, an extensive suite of rooms for the display and sale of choice articles in the horticultural line. There can be little doubt, from his excellent taste and his advantageous location, so easily accessible to the business community, and the throng of ladies who make Fourth street in fine weather a daily promenade, that he will make a decidedly favorable impression on the public.

Anthony Pfeiffer, ornamental flower gardener, Lebanon and Reading turnpike, two and a half miles from Cincinnati; store, 201 Walnut street, between Fifth and Sixth streets. Roses of every variety, hyacinths, tulips and other bulbs. Bouquets at all seasons.

*Flour and Feed Mills* —Twenty-one. Six of these grind flour

only, or principally, of which they turn out one thousand barrels daily. They employ forty-five hands. The feed mills grind corn, oats, barley, etc., to the extent of seventy-five hundred bushels daily. Annual value of product of flour and feed, three million two hundred and sixteen thousand dollars; raw material, 75 per cent.

Kauffman & Co., 157 Clay street, grind wheat and rye flour principally; also grind corn and chopped feed. Value of product, one hundred thousand dollars.

*Foundry Castings.* — This, one of our heaviest branches of manufacture, is carried on in every variety in which iron can be cast, from a butt hinge to a burial case. A number of these founderies include finishing shops. A few of them supply castings in the rough; others finish work to the highest degree of polish applicable to its use. A share of these confine their manufacture to a great staple product or two, and in the case of others a thousand different articles are the industrial result. It is difficult to reduce these founderies, therefore, to distinct and separate classes. The aggregate being first stated, the operations of a few will be given, as samples of each class. In making out the general statement, the products which are comprehended earlier in these pages, as agricultural machinery, are not included.

There are forty-two founderies, generally on a large scale. Of these, one fourth are mainly or entirely in the stove line, which is a heavy department in castings, one thousand having been made here in one day alone.

The value of foundry products is six millions three hundred and fifty-three thousand four hundred dollars. Number of hands employed, five thousand two hundred and eighteen; average value of raw material, 22 per cent.

Miles Greenwood's manufactory, well known as the Eagle Iron Works, on the corner of Canal and Walnut streets, extending northwardly to Twelfth street, eastwardly to Main, and on the west to Jackson street, embraces in its operations, besides its iron and brass founderies, machine shops, a steam heating department, etc., and gives constant employment to about five hundred hands, its operations having never been suspended for a single business day since its establishment in 1832.

Extensive as are the manufactures and business of this house, perhaps its most noticeable feature is the great and increasing va-

riety of its products, which vary from machine castings of ten tons each, to the minutest article that weighs but the twentieth part of an ounce ; and it is doubtless this variety that enables Mr. Greenwood to congratulate himself on the fact that his works have been enabled at all times, even in the severest seasons, and when business was most depressed, to give employment to their many mechanics and laborers.

All articles made here are manufactured also as largely, and most of them in much greater quantities, than in any other establishment in the West.

THE MACHINE DEPARTMENT turns out every variety of stationary and portable steam engines, planing and saw mills, hydraulic presses, mill machinery, printing presses, and hundreds of other articles of this description.

IRON HOUSE FRONTS and architectural castings have been manufactured by Mr. Greenwood since 1843, and been put up throughout the north-west and south. Some of the best buildings in St. Louis, New Orleans, Chicago, Memphis, Nashville, and the principal cities of Kentucky, Indiana, Illinois, etc., are adorned with specimens of iron work from this establishment, and entire fronts for one, three, four and five story buildings of the finest style and finish, are constantly and rapidly produced. An iron front for the first story of a building has been manufactured, fitted and put up in less than a week from receipt of the order, while a five-story block of the finest architectural design, with basement and sub-cellar piers also of iron, has been made and put up, including the making of patterns for nearly the whole of the work, in about three months.

STOVES are made here in very large quantities, and under the name of S. H. Burton & Co., are widely known throughout the western country for their fine design and finish, and the excellence of their manufacture.

BUTT HINGES, until 1840 exclusively imported from Europe, were first successfully made in the United States, in that year, by Mr. Greenwood, and by their good quality soon drove the imported article out of the market. Now, no hinges of this kind are imported into our country, while of all made in the United States, Mr. Greenwood's are still preferred, and command the highest price.

STEAM HEATING DEPARTMENT.—The business of heating build-

ings by steam, but a few years ago one of the novelties of the day, has now become of great importance, and has, in Mr. Greenwood's hands, been made one of the heaviest branches of his business. Two modes are now in general use—that known as high steam, or heating by dried radiation from the steam pipe itself, arranged in convenient coils; and the other introduced much more lately, and termed low steam, in which the steam is conducted to radiators or metallic cases of such various forms as convenience or taste may demand. The former is more adapted to large buildings, which will warrant the employment of a practical engineer, while the latter, which requires no more attention than a parlor stove, is more suited to the business house or private residence. Here again the spirit of western improvement has displayed itself, in the introduction of *cast* instead of *sheet* iron radiators. The latter have been used by all the eastern heating works, while the cast iron radiators are in this establishment rapidly superseding them, being of much more elegant design, and infinitely superior, both in durability and in the more regular distribution of heat. Many of them are finely ornamented, and when covered with slabs of marble, add to the furnishing and appearance of the drawing-room. A very large portion of the western and southern country visit us for the heating apparatus of their best buildings, and Mr. Greenwood has introduced them largely into the capitals and principal cities of Ohio, Kentucky, Indiana, Illinois, Tennessee, and through the West and South generally. The price varies from two hundred and fifty to thirty thousand dollars, and more, according to size and arrangement of the building.

The manufacture of all kinds of steam and gas fittings, and ornamental brass work, is also carried on in this department, on a large scale. Iron and brass valves for steam and water gauges, oil cups and globes, cylinders, air, frost and oil cocks, and a general assortment of articles suitable to every class of steam machinery. Of these, many articles are new inventions, in which the greatest care has been taken to make their adaptation to the purposes for which they are designed as nearly perfect as possible, and no judge of steam fittings or brass work can examine these articles without admitting their superiority of material and finish to work of the same class imported from the eastern establishments.

The entire apparatus for the manufacture of gas, both for large buildings and private residences, is also manufactured by Mr.



Greenwood in this department of his works, and is guaranteed perfect in its operation. To dwellers at a distance from large cities, no luxury is more desired than this.

Mr. Greenwood's steam heating or pipe department is personally superintended by Messrs. Charles M. Wilson and Jno. L. Frisbie.

**HARDWARE AND MALLEABLE IRON.** This branch of the Eagle Iron Works was established in 1844, under the name of M. Greenwood & Co.—M. Greenwood, Chas. R. Folger, and Nelson Gates present proprietors.

The principal object in the commencement of the business was the manufacture of malleable iron castings, and such articles of hardware as are required for building purposes; but the rapidly increased demand for articles of these descriptions, and hardware generally of American manufacture, rendered it necessary to extend, not only the facilities for manufacturing, but also the number and variety of articles, which have increased to such an extent that the catalogue now numbers more than fifteen hundred distinct articles; and in addition to these, they are executing orders for an endless variety of castings, plain and ornamental, in iron, brass, and other metals.

In the list of goods may be found about *thirty* varieties of house locks and latches, varying from the plainest cast to the most superior styles of wrought locks in use; in addition to which they manufacture vault, safe and bank locks. In this latter article they have brought before the public one of the most ingenious locks of its kind, as it possesses at the same time, ALL the desirable requisites of simplicity of arrangement, strength and durability of construction, superior workmanship, and that more desirable merit of being burglar and powder proof.

Shutter fasteners, wardrobe hooks, door bolts, a great variety; and in fact almost everything required in house building.

Piano stools, store stools, ottomans, shovel and tongs stands, tables with marble tops, garden seats and chairs, toilet glasses, etc., of beautiful designs and finish, furniture castors, thirty sizes, of iron and brass; bridle bits and stirrups, a large variety; buckles, rings, snaps, etc.

In malleable iron castings, a full stock of which is always on hand, may be found all articles required by carriage and wagon

makers, machinists, and for agricultural machines, garden implements, and for other purposes.

**SILVER PLATING.** In connection with house furnishing articles, and carriage trimmings, this establishment is at all times prepared to execute orders for plating at short notice and upon favorable terms, and guarantee all work of the best materials.

Having a brass foundery, supplied with every convenience, they furnish to order any description of brass castings for machinery, steam or water, gas fittings, lock work, etc., etc.

This description of the extent and variety of the operations of Miles Greenwood, and M. Greenwood & Co., while it falls short of doing justice to the ground it covers, affords ample evidence that there is not probably in the United States, and certainly in no other country, so wide a range of articles manufactured in any one establishment.

Anchor Iron Works, Chamberlain & Co., proprietors. Foundery, Hunt street, east of Broadway. Sale and sample rooms, northeast corner of Main and Ninth streets. This is probably the largest stove and hollow ware establishment in Cincinnati. The stoves are of every variety of pattern and form, and adapted either to the use of wood or coal as fuel. They also make sad and dog-irons, caldrons and sugar kettles, and a variety of other articles.

The building occupied by the firm as their works, is one of the most extensive and best arranged for operations in this line of any in the city. It is built of stone and brick, four stories in height, with a deep basement, having a front of two hundred and two feet on Hunt street, with a depth of one hundred and sixty-four feet, is fire proof, and has a metallic covering. The moulding room is one hundred and eighty-six by one hundred and thirty-six feet, with a lofty ceiling supported by cast iron columns, and is thoroughly lighted and ventilated. There are three cupolas in the centre of the moulding floor, the largest being a wrought iron cylinder sixty-seven feet high, seven feet in diameter, and lined with fire brick. Two engines are employed in driving two blowing cylinders, and one for driving the cleaners, grindstones, emery wheels, etc. The engine blowing cylinders and machinery shops occupy a space of two hundred and two feet by twenty-eight in the basement story, while the salesroom and office are in the front part of the first story. In the second story are the pattern and finishing rooms, and the third and fourth stories are devoted to storage, etc.

Chamberlain & Co. melt in these works three thousand two hundred tons pig iron per annum, and employ in their establishment two hundred and twenty-five hands, two-thirds of whom are moulders; and the value of the various products of their manufacture reaches three hundred and fifty thousand dollars.

This firm has recently commenced the manufacture of Sawyer's patent heating and ventilating stoves and furnaces, which are expected to inaugurate a new era in this department so deeply affecting health and comfort, and one so long the subject of abortive experiment and repeated failure. The present invention is claimed to have accomplished all it professed to perform, in more thorough and efficient ventilation, as well in the saving of fuel in heating, to a greater degree than in any other apparatus of this nature now in use. It has been introduced with marked success into Wesley Chapel in this city, and the trustees of that church certify that that building, as tested by thermometers distributed over the house, varied but a single degree in any one part of the chapel from that of any other part, the air in the upper portion of the edifice being only to that extent warmer than along its floor. They are also satisfied that it is equally successful in driving out impure air, and restoring a pure current from the external atmosphere. As this heating and ventilating apparatus is constructed on strictly scientific principles, its superiority becomes at once apparent to all intelligent persons.

*First.*—For its extraordinary heating capacity, and consequent economy of fuel—whereby a saving of from 20 to 30 per cent. is effected in the expense of warming buildings.

*Second.*—Its perfect ventilating qualities, insuring a full supply of pure and wholesome air to every apartment with which the furnace is connected.

*Third.*—An equal distribution of the heat, giving an even temperature throughout the space to be warmed.

*Fourth.*—The perfect control, by means of dampers, which this apparatus affords over the warm and cold air, each independently of the other, by which any desired degree of temperature may be obtained and held for any length of time, or varied at will by the operator.

*Fifth.*—For the ventilation which in summer may be carried on without heating the rooms, by placing a small lamp in the ven-

tilating chamber, whereby a current of pure air will be diffused through any room in the house.

These stoves and furnaces have become extensively known and used at the East, and approved in the same degree. Thus far they have been introduced in the West only at Chicago, Indianapolis and Milwaukee, not having yet been manufactured in this section of the United States. There can be no doubt that they will rapidly work their way into general use, and engross largely the field of usefulness which the article already occupies.

Kentucky Stove Works, G. W. Ball & Co., proprietors; office and warerooms, 32 and 34 Main street. These works are situated on Fourth near Russell street, Covington, Ky., and cover an extent of nearly three acres.

Here are made in large quantities every description of stoves, hollow ware and other castings, for the western and southern markets. Pig iron from the Hanging Rock region is used exclusively. They melt the best brands of this metal, so celebrated for strength and tenacity, and challenge competition in the durability of their wares, the smoothness of the castings, and the careful manner in which they are mounted.

Various new and important improvements in facilities for moulding operations have been introduced in this establishment, and the number and variety, as well as beauty, of the patterns of every shape and description, are unsurpassed anywhere, an efficient corps of pattern artists being constantly occupied in producing novel and original designs.

With their facilities, and the constant efforts of the firm directed to such improvements as observation and experience suggest, they will always be in the front rank in this important branch of manufactures.

This firm manufactures castings in an infinite variety. Fancy stoves of the highest class for design and finish; sad irons, tea-kettles, as well as the simplest utensils for the Indian tribes of the west and south-west.

It may be added, that the capacity of the "Kentucky Stove Works" is equal to that of any other establishment in the Union, and the fact that to the business activity and energy of G. W. Ball and Thomas R. Elliott, who constitute the firm, this city is indebted for a large amount of new and valuable business attracted for the



past ten years to this market, is a guarantee that the business of this establishment will ever rank among the first in this line.

I. & E. Greenwald, foundry and machine shop, steam engines, boilers, and mill machinery, No. 190 east Pearl Street, near Miami canal. Manufacture steam engines of all sizes, flour, saw and oil mill and general machinery; hydraulic presses, circular saw mills, etc., etc. Number of hands employed, seventy-five; value of products, eighty-five thousand dollars. These figures are exclusive of their agricultural machinery operations, which are already stated in that department. One-tenth of their work is for home consumption; the residue finds its market in the west and south. Their assortment of gearing patterns is one of the largest in the city, and as they have recently purchased the extensive machine shop formerly occupied by Niles & Co. as a locomotive factory, their machinery operations must greatly enlarge with the capacity of the edifice.

In addition to the manufacture of the various kinds of castings, of which illustrations have been thus far furnished, there is a class of foundries in which various articles are manufactured exhibiting a high degree of ornament and polish, and which connect, also, wrought iron fabrics, such as iron jails, iron railing, etc., to a considerable extent. Of these, the architectural iron works of Macy, Rankin & Co., corner of Elm and Pearl streets, is, in extent and importance, second to but few in the west, and the increasing demand for many of the articles of comparative recent introduction, which they manufacture, promises greatly to enlarge its operations.

Their architectural department, strictly speaking, comprises iron fronts for buildings, columns and lintels, capitals, sidewalk plates, stairs, railing, balustrade work, etc., but no inconsiderable portion of their business consists in the manufacture of marbleized mantles, which are made of cast iron, and finished in imitation of every description of marble, Brocatelle, Egyptian, Agate, Pyrenees, etc.

Nothing can surpass the imitation in effect. This material recommends itself by its cheapness and durability, its capacity of resisting a high degree of heat, and the fact that neither oils nor acids penetrate the surface. So nearly does it approximate the material it imitates, as to require considerable skill, as well as close inspection, to detect the difference. This manufacture is already superseding the use of marble to a great extent, not only in the cheaper forms of mantles, but for furniture tops, statuary posts, and many articles of architectural ornament.

This firm turns out a large amount of enameled parlor grates, some of which are finished with electro plating of silver. The enamel is put on in such a manner as to give a fine effect, and at the same time is as durable as the cast iron which it decorates.

Many different articles of iron furniture are here made, such as toilet stands, fire stands, tables, hat racks, chairs and settees, bedsteads, vases, etc.

They have now on hand for finishing, several iron fronts, and are turning out some very extensive jobs of columns. Those for the new State house at Madison, Wisconsin, were cast at this establishment. The dimensions of these are forty-nine and one-half feet high, fifty inches in diameter at the base, and thirty-seven inches in diameter at the top, surmounted with an ornamental iron cornice ten feet high and projecting five feet. They weigh nearly three hundred tons, and cost thirty thousand dollars.

These columns are put together in sections, having been made hollow, and of staves like a wash-tub, only the hoops are on the interior, the staves being provided with flanges, to which the rings or hoops are bolted.

The establishment occupies a front of one hundred and fifteen feet on Elm, and the same distance on Pearl, thirty by sixty feet on Burrows street, and thirty by sixty feet on Columbia street. The principal building is five stories high, and is closely filled with machinery and workmen. Of their principal staples they keep ample supplies constantly on hand. The original establishment, which is now represented by this, was commenced in 1829, and has been constantly enlarging in importance during the thirty years of its existence.

One of the departments in the business of Macy, Rankin & Co. is iron jail building, which is on a pretty extensive scale as respects size. These jails are constructed entirely of iron, and made of any required dimensions, and two or more stories high, if thus wanted. When all the parts are completed, it is put together here, and every part fitted to its proper place, when it is taken down and removed to its place of destination. The walls are made of boiler plate, strongly riveted, and the doors of the cells are of iron lattice work. These iron jails are not only secure, and fire-proof, but they afford every facility for ventilation, and their general business arrangement is admirable. They are finished very neatly, but not sufficiently so as to render them a too attractive home.

These jails form the interior of a square brick wall, which surrounds them on all sides, but which supplies a passage way throughout, between the iron and brick walls.

One of these jails, twenty by thirty feet, and two stories high, intended for Muncie, Ind., has just been sent off. These prison novelties are highly approved wherever introduced, as they afford peculiar facilities for promoting health and cleanliness among the tenants, the absence of which has been so long and extensively a source of regret to the philanthropist.

The number of hands employed, when the works are running to their full capacity, is two hundred, and the amount of work turned out annually, two hundred and twenty-five thousand dollars. These products find a market in almost every direction, but mostly to the south and west.

Valleau & Jacobs, late E. Jacobs & Co., Nos. 86, 88, 90 and 92 Elm street, iron jail builders. Mr. Jacobs, of this firm, is the original inventor of a "wrought iron plate jail," which has become deservedly popular. Within the two years past, the firm have built these jails in the following counties; Fayette, Champaign, Crawford, Winnebago, McLean and Edgar, in Illinois; Gasconade, Lewis, Platte, in Missouri; Randolph, Sullivan and Clark, in Indiana; McCracken and Graves, in Kentucky; Chicot, Jefferson and White, in Arkansas; Van Buren, Iowa; Crawford, Ohio, and Douglas, Kansas Ter.

As to the merit of this peculiar style of jail work, a better judgment can be formed from the subjoined testimonials, than from any description, however elaborate, that can be furnished here:

A. J. Merriman, county judge of McLean county, Illinois, says: "I take pleasure in saying to you that we are well satisfied with the jail you built for our county last season. In fact, it is considered a model jail throughout the centre of our State."

Thomas Rankin, county judge of Van Buren county, Iowa, writes: "You ask my opinion of the iron jail you built for our county. I am happy to say I am well pleased with it. I believe that for *safety*, convenience and comfort, it is not excelled in the west. It gives good satisfaction to the people of the county, and is a terror to evil doers."

A. J. Stephens, county judge of Jefferson county, Arkansas, and his associates, certify as follows: "We, the undersigned, judges and officers of the county court, think it due to Messrs. E. Jacobs

& Co., contractors and builders of the Jefferson county jail, now just completed, to say that it is built in strict accordance with the stipulations of the contract made with them, and in the particulars of convenience and construction, beauty of design, and perfect safety, it exceeds our anticipations. We deem the escape of prisoners from within the walls, when due precaution is exercised, as almost an impossibility.

To the counties of our State that may be in need of a building of this description, for the better security of criminals, we take a pleasure in recommending E. Jacobs & Co. as every way reliable in any contract of this character that they may enter into. We also express ourselves on the part of the county, as in every way satisfied with the execution of the jail contract entered into with this county, and consider that they have fulfilled their part in every particular."

Julius Hondhousen, county judge of Gasconade county, Missouri, writing to the commissioners of Platte Co., Mo., says:

"As you desire information from me relative to the iron jails lately invented by E. Jacobs & Co., of Cincinnati, and now being manufactured by them, I can only say that said firm are now building one for this county, as to the merits of which I can judge better when it is done. However, for your satisfaction I will say that previous to contracting with them, we had corresponded with some ten or eleven counties, where Jacobs & Co. had built iron jails, and in *every instance* their work was spoken of in the most flattering terms. These correspondents also state that Messrs. E. Jacobs & Co., are gentlemen of high respectability, and in all cases fulfill their contracts to the letter."

The firm have applications pending for a patent for this jail, and for several important improvements upon the same, embracing an "improved joint," "register," "cell door fastener," "lock," etc. The jail when completed, is furnished with two iron bedsteads, water closet, and wash-basin in each cell, skylights in the ceiling, double entrance doors, and double grated hall window. It is, without doubt, one of the most perfect arrangements for the security of prisoners known to the present age.

Messrs. Valleau & Jacobs are also furnishing all other kinds of iron work peculiar to a foundery and iron railing manufactory, which they have attached to their establishment.

Niles Works. H. A. Jones, President; C. W. Smith, Secretary



and Treasurer—successors to Niles & Co.—iron and brass founders and machinists, No. 222 east Front street, Cincinnati. Manufactures every variety of steam engines, sugar mills, saw mills, draining machines, etc., and steam apparatus for making and refining sugar. Iron and brass castings of every description; boilers, heavy forgings, tyre-lathes, boring mills, planing machines, etc., etc., made to order. This is a foundery which turns out principally heavy castings. In addition to the above, they make heavy castings for rolling mills, marine engines, oil presses for cotton seed; saw mill engines and saw mill machinery; powder machinery; machinery for blast furnaces, all of a more or less heavy class. Every article required in Louisiana or Mississippi, can be furnished to the planter by these works more cheaply than by the Philadelphia founderies, for the reason that it is delivered at once on the spot wanted, thereby saving the delay and expense incident to its reception via New Orleans.

These works employ three hundred hands, and produce a value of four hundred thousand dollars; raw material,  $33\frac{1}{3}$  per cent.

James Todd, north-west corner Seventh and Smith streets, foundery and machine shop. Established 1836. Employs one hundred hands, and turns out over one hundred thousand dollars' worth of work per annum, in the shape of steam engines and boilers, circular, sash and mulay saw mills, planing and flooring machines, portable corn and flour mills, cotton, tobacco and other screws, machinery and castings in general, principally for the southern market, where the work of this establishment has gained an enviable notoriety for durability and finish.

W. R. Dunlap & Co., Cincinnati machine works, corner of Lawrence and Front streets, manufacture steam engines of all sizes, from two to one hundred horse power, from new patterns, possessing all the late and valuable improvements. Cylinder, flue and tubular boilers, gearing and machinery for flouring mills and distilleries, portable flouring mills, with bolts, elevators, and all the machinery complete, burrs, bolting cloth, smut mills, bran dusters, Kinman's celebrated flour packer; mulay, sash and circular saw mills; Parker water wheels; Farnham's double-acting lift and force pumps; hydraulic rams; Judson's patent governor valves and combined governor; brass and iron castings generally. They also manufacture ornamental fountains, made of cast iron, richly carved, comprising a great variety of figures, from which they

combined over one hundred different styles. Prices ranging from ten to fifteen hundred dollars.

The foundery of S. S. Ashcraft, on the canal, near Liberty street, is devoted principally to the manufacture of water and gas pipes, of which a very large amount is furnished for the water and gas companies in this city and elsewhere.

The works are under the superintendence of Mr. Ashcraft and Mr. J. A. Dyett. This foundery was established in 1847, and now occupies a front of three hundred feet on the canal, and extends back about one hundred and fifty-six feet to Providence street. There are five buildings, including the pattern shops, carpenter shop, office, etc., and the foundery proper measures eighty by two hundred feet.

About thirteen tons of iron are melted daily, and the yearly aggregate is about fifteen hundred tons.

Aside from the manufacture of water and gas pipes, a large business is done in gas apparatus, castings for coal oil works, retorts, etc., steam and water pipes for heating buildings, and some machine castings.

He has a contract with the United States government for two hundred tons of eight inch cannon shot and shells.

- He employs about one hundred hands, and does all the work for the gas company in this city, including those heavy columns, weighing five tons each, for the gasometer. He also furnishes the castings for nearly all the gas works in the west.

Breed, Barstow & Co., office, 28 Sycamore; foundery, Eighth street, west of Freeman. Employ thirty hands. Manufactures stoves of a great variety of patterns and beauty of design, to the value of sixty thousand dollars.

G. P. Lawson, stoves, grates, hollow ware, etc., salesrooms, No. 21 east Pearl street. Value of yearly sales, thirty-six thousand dollars.

*Furniture.*—By this article is usually understood various equipments for housekeeping; such as bedsteads, bureaus, tables, stands, wardrobes, desks, bookcases, cribs, sofas, settees, lounges, divans, plain and fancy chairs, ottomans, etc. It would have been desirable to classify these by assigning them to their respective workshops, but in point of fact, these establishments are so various in their fabrics, some confining themselves to one or two prominent articles, others making every possible variety, and others, again,

blending the chair business with what is called cabinet ware, that such classification becomes imperfect and unsatisfactory, and fails to exhibit a clear statement of this important department of our manufacturing interest ; a general synopsis of the business will, therefore, be given in the aggregate of products, and number of workmen, and the various descriptions illustrated, as in the case of the founderies, by the statistics of particular establishments, as specimens of the various classes that exist.

Furniture is made here by a few shops for the supply of auction sales, but the great bulk, beyond what is wanted for our own citizens, finds its market throughout the entire west, south and south-west. The entire product of one hundred and twenty factories, large and small, of cabinet ware, chairs, etc., amounts to three millions six hundred and fifty-six thousand dollars, the business affording employment to two thousand eight hundred and fifty hands. Value of raw material, 30 per cent.

H. B. Mudge, factory and salerooms, Second below Vine street. This is the most extensive bedstead factory in the west, and well worthy of being shown to a stranger, as a means of impressing him with a suitable sense of the industrial and mechanical energies of Cincinnati.

The building, which is of brick, is five stories in height in front, and seven in the rear, and one hundred and ninety-five by seventy feet on the ground. The machinery consists of seven planing and two tapering machines, sixteen turning-lathes, six boring, and two tenoning machines, four splitting, and four buff saws, all which are driven by steam. Two hundred and forty hands are employed in this establishment. A very vivid impression of the power of machinery is given in this case, by the fact that two hundred and forty bedsteads are made and finished, as an average, in one day, or one bedstead to each workman ; while under the hand system of manufacture, a first rate bedstead is more than a week's work for one journeyman. The escape steam is employed not only in warming the building in winter, but softens the glue, and being taken through a cylinder in which the veneers are steamed, fits them for being fastened to the bedstead. Five million feet of lumber are annually worked up here into bedsteads, of which, three hundred and fifty thousand dollars is the aggregate value. The stock of lumber on hand is never less than two million five hundred thousand feet, and

of bedsteads a value of fifty thousand dollars. The lumber used here is seasoned by steam, and air exposure afterward.

These bedsteads are of every variety of pattern and material, and degree of finish and cost; not less than ninety-five varieties being manufactured on the premises. They range from one dollar thirty-seven and a half cents, to seventy-five dollars in price, at wholesale.

Poplar, sycamore, black walnut, and cherry, are the lumber; and black walnut, mahogany and rosewood the veneers employed in the fabrication of these bedsteads.

The headboards of the finer kinds of bedsteads are not morticed into the post, as usual, but are fastened at the ends by iron hooks, secured to the head posts, and are let down by mortises into the head rail. This is obviously a very great improvement, and greatly facilitates their being taken to pieces and put together, when necessary. The market for these bedsteads is throughout the west, south and south-west. All the principal hotels in Memphis, Nashville, Mobile, and New Orleans, have been furnished with bedsteads from this factory.

Mitchell & Rammelsberg, factory on John street; sample and salesrooms, Nos. 23 and 25 east Second street, and 99 west Fourth street. This is not only the largest furniture establishment in the city, but probably in the United States; and does not, as most factories in Cincinnati, confine its operations to two or three staple articles, but comprehends in its fabrics almost every description of cabinet ware and chairs.

Every description of machinery may be found here, calculated to facilitate the saving of manual labor, and lighten its severity, by relieving the workmen of the coarsest and roughest part, such as rough planing and ripping, and allotting him the more delicate operations, which give play to the exercise of skill and judgment.

So great and rapid has become the constantly increasing value of building and materials in this city, that it has become necessary in the construction of both workshops and sales establishments, to make the ground space occupied by this concern, available to the utmost extent for its appropriate use.

The factory consists of two buildings, extending on John street one hundred and seventy-five feet, from Second to Augusta streets, with the exception of a space between the buildings, which has a



fire-proof basement for the boilers, with a fire-proof iron door vault for the shavings.

Each of the buildings is eight stories high, and has been provided with steam elevators for raising and lowering the work, in one case extending to the roof, upon which the work is sometimes taken to facilitate the drying of the varnish. In nearly every story these buildings are connected by bridges, forming passage-ways from one to the other, by which the work can be carried from the machinery department to the finishing rooms.

The building which contains the machinery is sixty feet by one hundred and twenty feet, and every portion of each of the eight stories is advantageously occupied. The first story, or basement, contains two steam engines for driving all the machinery, sixteen turning lathes, a tin punching machine, three of Bettgemen's patent machines for cutting dovetails in bed rails, two of Wright's patent machines for turning bed spring discs, and in one end is a large fire-proof room occupied as a blacksmith and machine shop, for the exclusive use of the establishment.

In the second story are found three Daniels' planing machines, two of Woodworth's planing machines, two mortising machines, one grooving machine, four rip saws, three cross-cut saws, and three scroll saws, all of which, as well as the other machines mentioned are run by steam power.

In the third story is one of Daniels' patent planers, two tenoning machines, two friezing machines, three scroll saws, one moulding machine, one mitre saw, three fine rip saws, three fine cross-cut saws, one grooving machine, four boring machines, and four jointing machines. The fourth, fifth, sixth, and seventh stories are occupied by workmen engaged in putting work together, with the exception of the carvers, thirty-six hands, who occupy a portion of the fifth story.

The eighth story is used for storing the work as it comes from the different machines, and this large loft, sixty by one hundred and twenty feet, is piled nearly to the roof, leaving passage ways only, with stuff, dressed, veneered and ready to be put together. These prepared material are all arranged so as to be convenient of access. In each story of each building there are steam pipes for heating the buildings, and glue ovens heated in the same manner, no fire, gas, or lights being admitted into any part of the factories.

The other building referred to is eighty feet square, and each

of the eight stories is occupied for finishing, varnishing, polishing, etc., after the wood work has been completed in the machinery building. In the basement are large quantities of mahogany, walnut, rosewood, and other veneers; and in the other stories, large assortments of looking glass plates, marble tops, etc. With the exception of such space as is needed for the workmen, this immense building is densely filled with work in a variety of stages of progress. The number of different patterns of the various descriptions of furniture exceeds five hundred.

In adjoining squares from the one occupied by the factory buildings, are lumber yards, the aggregate area of which is seventy-five thousand feet, and this space, with the exception of the passage ways, is piled full of lumber to the height of about twenty feet. The kinds of lumber used are poplar, black walnut, cherry, oak, pine, ash, maple, solid mahogany, and solid rosewood. Several million feet of these various kinds of lumber are used in this establishment annually.

The wholesale department is accommodated by a large five-story building on Second street, between Main and Sycamore. It is irregular in shape, but its space is equivalent to thirty-five by one hundred and thirty feet. A portion of this building is devoted to the manufacture of cane bottoms for chairs, stools, etc., but the principal portion of it is filled with manufactured work ready for market.

Their retail store is a handsome seven-story building on Fourth street, adjoining the custom-house and post-office, and extends through to Burnet street, opposite the Burnet House. It is thirty-four by one hundred and fifty feet, and is one hundred feet high on Fourth street, above the sidewalk. Each story is divided into two sections, the stairs in the centre approaching alternately first to one end of the building and then to the other. This is a novel and desirable arrangement, and affords to the visitor a view of the furniture on three different sections at any stand point, and this plan also admits light to much better advantage than the ordinary form, and as the customer passes up only half a story at a time, it is less fatiguing. This building is filled with sample goods, there being but one piece, or one set of each kind in the whole building. The price of bedsteads ranges from \$1 to \$150; bureaus, from \$7 50 to \$150; and sets of chairs, from \$3 to \$150.

In one of the upper lofts of this building, is an apartment for doing the upholstery work, which is approached by a circular stair-

way, at the rear end of the building. This stairway is only three and one-half feet in diameter, and is seventy feet high; the stairs are iron, and the whole fire proof. The entire floor surface of the factories and salesrooms is equal to two hundred thousand square feet, or about five acres.

It is only about twelve years since the wholesale furniture trade began in this city, and this firm alone now turns out over a value of five hundred thousand dollars yearly, without running their machinery and hands to the utmost capacity.

A branch house has been established by this firm in St. Louis, under the title of Mitchell, Rammelsberg & Co. They occupy sixty by one hundred feet of the fine six-story block at the corner of Washington and Fourth streets, and a large share of their stock is manufactured at their factory in this city.

This factory has been twice burned out, at a cost of fifty thousand dollars, but the indomitable energy of the firm has prevailed over all adverse circumstances, to build up their business to its present position, and second to none in this line on the American continent.

*Fringes, Tassels, etc.*—Four establishments; employ fifty hands, with a product of sixty-six thousand dollars; raw material, 50 per cent.

*Gas Fitting.*—There are eleven gas fitters in this city, who employ fifty-six hands, with a product of one hundred and ten thousand dollars; raw material, 50 per cent.

*Gas Generator, Portable.*—J. L. Drake, No. 65 Sixth, between Walnut and Vine streets, manufactures this article for country residences, public buildings, manufacturing establishments, steamboats, halls, hotels, offices, stores, etc., and all places out of the reach of regular gas works. These gas generators manufacture benzole gas. The apparatus is simple, free from danger by explosions, managed with ease and affords a light superior to all others of the stationary kind, in cheapness, convenience and efficiency. Mr. Drake manufactures coal oil lamps, and deals in benzole burning and lubricating coal oils. Value of product, fifty thousand dollars; employs fifteen hands; raw material, 67 per cent.

*Gilders.*—Eleven establishments, seventy-five hands; value of product, sixty thousand dollars; raw material, 50 per cent.

Cincinnati Ornamental Composition Works, and Gilding Establishment, No. 135 Sycamore street, between Fourth and Fifth

streets, Thomas Bown, proprietor. Manufactures to order, and keeps constantly on hand, pier and mantle mirrors. Also, window cornices, portrait and picture frames of all sizes, and the latest styles. Oval frames of all patterns and sizes, gilt mouldings, brackets, bases, tables, cards, and tassels, oval turnings. Steamboats and store rooms decorated with composition. Old frames regilt, repaired etc., etc. The trade and dealers supplied with any article in the line. Ovals in the wood, and mouldings, constantly on hand.

An infinite variety of ornamental designs may be found here unequalled this side of New York or Philadelphia.

*Gilding on Glass.*—This is a novel, ingenious, and remarkably handsome style of ornament, applied to a great variety of purposes, and supplying a deficiency of the past, which was met by importations from London and our eastern cities. It comprehends glass signs in burnished gold, of all styles, and suited for every business; druggists' gold labels, and jars labeled, and enameled inside; porcelain pots and drawer knobs, elegantly decorated with labels burnt in, with ornamenting of every description on glass. All this is applied to an inconceivable variety of subjects. I shall specify one only. At this establishment may be seen, executed in this line, a strikingly effective and handsomely executed portrait of Mayor Thomas, which surpasses, in my judgment, for life-like character, any other species of portrait, oil, miniature, ambrotype, or photograph. Employs five hands, with a yearly product of ten thousand dollars. This is a business of daily increasing importance.

*Glass Works.*—Gray, Hemingray & Bros., employ eighty hands; value of product, one hundred thousand dollars.

This is equal to any establishment in Pittsburg, in importance, and excels any there in the variety of articles which it manufactures. To enumerate the principal ones only, would be to furnish a general and extensive catalogue; many of these are peculiar to their works: such as glass milk pans, atmospheric fruit jars, etc.

Every description of flint glass ware, apothecaries' furniture, and chemical apparatus made to order on short notice. Perfumers' ware, telegraph glasses, and lightning rod insulators. Patent self-adjusting lanterns for railroads, steamboats, and for general purposes.

*Grease Factory.*—Joseph Whittaker, office No. 355 Broadway;



factory on Deer creek. Employs one hundred and twenty hands, who are engaged in the winter in this department, and in the summer upon cleaning and dressing bristles, hair, etc., of the hog—value of product, one hundred and thirty thousand dollars; raw material, 40 per cent.

*Glove Factories.*—Three; employ forty hands, principally females; value of manufactures, thirty thousand dollars; raw material, 60 per cent.

*Glue.*—Six factories, forty hands; value of product, thirty-six thousand dollars.

*Gold Leaf and Dentists' Foil.*—One factory, that of James Leslie, No. 181 Walnut street, employs seven hands; value of product, fifteen thousand dollars; raw material, 50 per cent.

Mr. Leslie has been twenty years in this business, and his products are unsurpassed in purity, pliability and toughness. Few persons are aware of the extensibility of gold. A piece of gold equal in weight to ten grains No. 1 shot, will beat out into seven thousand five hundred square inches, and each shot into a surface of gold large enough to cover an extra imperial sheet, such as the *Cincinnati Enquirer*.

*Gold Pens.*—Two shops, five hands; value of product, sixty-five hundred dollars; raw material, 50 per cent.

*Gunsmiths.*—Six establishments, which make rifles, shot belts, etc. Thirty hands; value of product, forty-five thousand dollars; raw material, 40 per cent.

B. Kittridge & Co., dealers in guns and sporting apparatus, 134 Main street, and 55 St. Charles street, New Orleans. Are extensively engaged in the manufacture of rifles, shot belts, pistol belts and holsters, and leather gun covers and cases. They are heavy importers of single and double shot guns, percussion caps and general sporting apparatus. Large dealers in shot; only agents in the west for the sale of the well known Colt's pistols and other arms. Dealers in English and American sporting, cannon and blasting powder. Agents for the Orange gun powder, which is becoming very celebrated, and is well known by the orange stain which it leaves in burning.

Established in 1845, the first important wholesale house established in the west, and by far the most extensive at the present time.

*Hat Block Factory.*—One, with four hands, and product of four thousand dollars ; raw material, 10 per cent.

*Horse Shoering.*—Twelve shops ; forty hands ; product, fifty thousand dollars ; raw material, 50 per cent.

*Ice.*—Twenty dealers, who employ one hundred and thirty hands ; value of product, two hundred and fifty thousand dollars ; raw material, 5 per cent.

*Iron—Bar, Boiler, Plate, Sheet, etc., Iron, and Nails.*—Ten rolling mills, some of which are outside of the city, but as they manufacture entirely for this market, they enter into the general aggregate. Number of hands eighteen hundred and twenty-five ; value of product, four millions three hundred and thirty-four thousand dollars ; raw material, 45 per cent.

Licking Rolling Mills, Phillips & Son ; employ two hundred and seventy-five hands, and their works are in constant operation throughout the year, Sundays excepted. They consume, annually, five hundred thousand bushels coal. Yearly products are, three thousand tons small round and square and hoop iron, etc. ; two thousand tons large round and square, railroad chair iron, etc. ; two thousand tons fire bed and sheet iron ; one thousand tons boiler iron, heads, etc. ; eight thousand tons iron of all descriptions, averaging eighty-seven dollars and fifty cents per ton ; aggregate value, seven hundred thousand dollars. The sheet iron made here is annealed on the surface, which renders it apparently equal to the Russia sheets.


Five thousand tons pig iron, two thousand tons Tennessee clear blooms, and one thousand tons scrap iron, are annually consumed at this establishment.

The works occupy an extent of six acres, one half of which is covered with buildings.

Globe Iron Works, Worthington & Co., proprietors. Office, 42 and 44 west Second street. Manufacture every species of rolled iron, such as bar, sheet, boiler plate, fire bed, etc. Also make galvanized tubing for wells. Yearly product, four thousand tons. Also, make railroad chairs, iron rivets, and iron wire of all sizes. Work one hundred and sixty hands, with a product of three hundred and fifty thousand dollars.

*Iron Bridges—Tubular Wrought.*—This is one of the great inventions of modern times, which will doubtless supersede all other descriptions of bridges.





Steam Marble Works.  
**CHAS RULE & CO.**  
Wholesale & Retail Dealers  
FOREIGN & AMERICAN MARBLES.

Cor. of Broadway & Fifth Sts.

**CINCINNATI.**





Their advantages are,

1. They can be built almost as cheap as those of more perishable materials.

2. Owing to their material and mode of construction, they are less liable to injury by either floods or winds.

3. They are indestructible by fire or the lapse of time.

4. As they do not weigh one sixth as much as ordinary wood bridges of the same length, they do not require one half the mason work and stone for the abutments, an important item of expense, when the right kind of stone, as is often the case, cannot be found convenient.

5. Being made in sections, they are convenient to handle, and are therefore portable by canal boat, wagon, or railroad, to their place of use.

6. For the same reason, they can be fitted together and put up in less time and with less number of hands than any other description of bridge, and are therefore admirably fitted on short notice to replace frame structures, on railways or other roads, that have been carried off by high waters.

Lastly. This is the strongest bridge that can be made. They will bear about two hundred times their own weight. A model weighing eighteen lbs., and of four feet span, was recently tested in Cincinnati, in the presence of intelligent and scientific judges, and found capable of bearing, without the slightest deflection, five thousand lbs. pig lead, equal to a weight of three hundred and sixty tons on a bridge forty-eight feet in length.

T. W. H. Moseley, of the firm of Moseley & Co., iron bridge and roofing works, 497 west Third street; office, 57 west Third street, is the inventor, patentee and constructor of these bridges. The firm works seventy-five men, and consumes ten thousand tons pig iron in their bridge and roofing operations. As this is manufactured into bars, sheets and rods by our rolling mills for these uses, the original cost of the pig metal, three hundred thousand dollars, acquires in the process an aggregate value of more than a million of dollars, the importance to the community of this bridge and roof manufacture, as an industrial feature of Cincinnati, becomes manifest. A large amount of productive industry, beyond that amount, however, is created or sustained by this establishment. I refer to the putting up of these bridges with their roofs, which at the present ratio of production and sale, requires

more than one thousand persons for this purpose. This involves a business additional of one million dollars in value. Large as are these figures, the proprietors consider their business but in its infancy.

A remarkable feature in this business is the large proportion of orders from distant States and territories, where these bridges are superseding the erections of the past thirty years. They have been constructed here, transported by river and railway as far as Richmond, Virginia, and put up there at a greatly less cost than any other species of bridge could be constructed in the vicinity.

*Japaning Tin Ware, and Tinnners' Machines and Tools.*—One establishment, working seventy-four hands, and producing a value of one hundred and thirty thousand dollars; raw material, 40 per cent.

*Ladders, etc.*—There are half a dozen shops in this line, most of which make rough or cheap articles. Number of hands, twelve; value of products, twenty thousand dollars.

Thos. J. Magee, No. 45½ east Third street, patent ladder factory, manufactures the article in every variety and for every purpose. They are so constructed by braces and supports, and in some instances by slides, that they are made to any length requisite for reaching the highest buildings, and at the same time are both light and strong. Mr. Magee also makes fruit stands, and fits up stores to order, and executes all kinds of job work in his line.

*Lever Locks, etc.*—Ten shops, mostly on a small scale; work sixty hands; produce a value of seventy-five thousand dollars; raw material, 40 per cent.

*Lightning Rods.*—Three factories; employ thirty-five hands; produce in value one hundred and seventy-five thousand dollars; raw material, 50 per cent.

*Lead Pipe, etc.*—One factory, with a capacity of turning out more than one million lbs. of manufactured lead annually, to a value of sixty-one thousand dollars; raw material, 85 per cent.

Here are made bar and sheet lead pipe of every size, from one fourth inch to four inch calibre, and of every grade of strength, that may be needed; aqueduct pipe, pipe for chemical and other uses.

*Liquors, Domestic.*—Brandy, gin, wines, cordials, etc., are manufactured in Cincinnati to a great extent, and there are as many as forty establishments, employing two hundred and forty hands,

which make of these articles three hundred thousand barrels of forty gallons each, annually, worth, at twelve dollars per bbl., three millions six hundred thousand dollars ; raw material, 50 per cent.

*Lithographers.*—Six establishments. Some of these are principally employed upon maps and plats of property ; others upon portraits and landscapes, and others again upon mercantile and bank lithographs, such as notes, drafts, checks, etc.

They employ sixty-six hands, and execute work annually to the value of one hundred and sixty-five thousand dollars ; raw material, 35 per cent.

The increase of business in this line, from one lithographer with four hands, in 1840, turning out four thousand dollars worth of work, to four establishments in 1850, with twenty hands, and a product of twenty thousand dollars, and now six lithographers, with sixty-six hands, exhibiting a product of one hundred and sixty-five thousand dollars, is not more remarkable than the continued advance in the art as respects taste in design and excellence in the finish of what is now executed here. It requires a good judge to distinguish some of our Cincinnati lithographs from steel engravings.

Gibson & Co., lithographers, engravers, fine job printers, and paper dealers, north-west corner Third and Main street, are extensively engaged in executing every variety of commercial and banking engraving, such as bonds, scrip, drafts, certificates of stock and deposit, notes, checks, bill and letter heads, show and business cards. They also get up and supply every variety of drug, wine, liquor and perfumery labels ; also, label books for druggists.

By having constantly extensive supplies on hand of just the articles needed by purchasers, they do a very large and increasing business throughout the west, south, north and south-west to a much greater distance than would be generally supposed ; filling orders from points as distant as Canada and Nova Scotia.

Middleton, Strobridge & Co., north-west corner Walnut and Third streets. In this establishment are embraced all kinds of lithographing, such as views of cities and buildings, landscapes, etc., in one or more colors ; portraits, maps, bonds, certificates of stock, etc. ; drafts, checks, etc., in all kinds of commercial work, almost equaling the finest engraving on steel. Value of work per annum, twenty-five thousand dollars. Hands employed, twenty.

G. A. Menzel, No. 99 west Sixth street, employs twelve hands,

and produces an annual value of thirty-six thousand dollars ; raw material, 25 per cent.

Execute in the best style maps, plates, portraits, buildings, plats, landscapes, diplomas, labels of all kinds ; also topographical and historical pictures. Mr. Menzel has occupied a high standing professionally, for many years here.

Ehrgott & Forbriger, practical lithographers, Carlisle Block, south-west corner Fourth and Walnut streets, are prepared to execute in the very best style every species of work on stone, plain and in colors, as landscapes, portraits, show cards, diplomas, music titles, book illustrations, maps, bonds, checks, drafts, notes, bill and letter heads, cards, labels, machines, etc., etc.

The establishment of Messrs. Ehrgott & Forbriger is in a great state of completeness, and those who may require lithographic work cannot do better than give them a trial. They guarantee their work to be equal to any executed in the country, and at the most reasonable cost. They are experienced workmen, and strive to excel in their department.

It will be seen that several embellishments in this volume are from this establishment.

*Machinery, Wood Working.*—Two factories, which work eighty-two hands, and produce a value of one hundred and seventy-five thousand dollars annually ; raw material, 40 per cent.

Lane & Bodley, corner John and Water streets, manufacturers of Woodworth planers, Daniels' planers, Lane & Bodley's patent power mortising and boring machines, sash sticking and moulding machines, tenon machines, hub boring machines, hub hewing machines, turning lathes, spoke lathes, felloe bending machines, scroll saws, wheelwright's machinery, Lane & Bodley's patent portable circular saw mill, and a great variety of other wood-working machinery. They employ fifty hands, and produce one hundred thousand dollars.

Lane & Bodley's power mortising machine enjoys an enviable celebrity. Orders for them have been filled from Russia, Germany, Cuba, South America, Canada, and every State in the Union. Their circular saw mills possess some strikingly original peculiarities, that lessen the number of hands necessary to operate them, and increases their products to such an extent as to create a large demand for the article. They make every description of machi-



nery that takes the log from the woods, and makes it up into every variety of products.

Step toe & McFarlin, Western Machine Works, No. 218 Second street, between Plum and Western Row. This establishment also makes a variety of machines for working in wood, comprehending Steptoe's mortising machines, sash moulding and slat machine, improved resawing machine, Woodworth's planers, Steptoe's improved mortise machine, Daniels' improved planer, tenon and sash sticking machines, Fay's patent mortising machine, circular saw mandrels, journal mandrels, etc., etc. This firm makes more mortise machines than any other in the United States, and in respect to the Woodworth planing machine, they have entirely driven the eastern article from the market. Of these last, they make fifty to sixty annually, varying in value from five hundred to one thousand dollars.

It has been the constant aim of the senior partner of this concern, for the last twenty years, to supply from Cincinnati the demand of the west with this kind of machinery. He has spared no expense to make the various articles of his manufacture both better and cheaper than the products brought from the east, so as to overcome the tendency of persons purchasing abroad what they can get at their own doors. Steptoe & McFarlin work thirty-two hands, and produce an annual value of seventy-five thousand dollars.

*Malt.*—This article is manufactured in the city and vicinity for brewers' and distillers' use, principally for the first named class, for home consumption in beer and ale, and for export. Value of product, five hundred and eighty-nine thousand four hundred dollars.

*Marble Works.*—There are twenty-two marble yards in this city, many of which are, however, not on an extensive scale. They employ two hundred and ninety hands, and produce a value of three hundred and twenty thousand dollars. Value of material, 50 per cent.

It is but a few years, comparatively, since the manufacture of marble, as one of the industrial arts, was first established in this city, and in the march of progress this branch of business has taken most rapid strides. The little shops in which the pioneers in this branch of manufacture first carved the epitaphs of our loved and lost ones upon imperishable marble, have given way to more

extended establishments, fitted up with all the appliances which machinery can furnish to facilitate their work.

The beneficial influence which this branch of manufacture exerts in a community is not restricted to those immediately engaged in the business, either as employees or workmen. Its value to our city must not be measured merely by the number which it feeds and clothes. The influence which it exerts on our community, cultivating the tastes of the masses, and fitting our youth to adorn a higher grade in the scale of civilization, is of incalculable value. For proof of this, advert to the old graveyards. The hand of friendship has there raised a plain memorial of the honored dead, whose relatives have homes sufficiently near to protect the structure from vandal hands, yet how neglected and dilapidated it becomes in a few short years. How widely different now! the surviving friends erect memorials of much greater cost and value; they call in the aid of the artist, and supplant "the frail memorial with shapeless sculpture decked," by a chaste memento, where, scattered oft

—————" The earliest of the year,  
By hands unseen, are showers of violets found;  
The redbreast loves to build and warble there,  
And little footsteps lightly print the ground."

The monument now erected is guarded by a tender care, and the highest, holiest feelings of our nature find exercise in contemplation: the thoughtless schoolboy, whose noontide sport found vent in playing leap-frog over the headstones in our ancient church yards, is impressed with a feeling of veneration when he approaches our beautiful rural cemeteries, and feels that the ground on which he stands is indeed "sacred to the memory" of the honored dead.

We may not, however, moralize too much in a work devoted to facts rather than fancies, and so advert to more critical notices of the establishments engaged in this manufacture.

The old pioneer of marble working, David Bolles, is still engaged in the business, but at a much more extensive and convenient establishment, than at my last notice of the growth of Cincinnati. The establishment of Chas. Rule & Co. is, however, at the head of the list in point of the magnitude and variety of the articles manufactured; everything now-a-days made of marble, from the plainest headstone to the most costly mausoleum, can be obtained

at this marble yard at the shortest notice. Their establishment is not only the largest in the west, but will compare favorably with any works of the kind in the United States. They ordinarily employ from sixty to seventy-five hands, and in the busiest seasons a much greater number; their products are valued at about one hundred thousand dollars annually; and a comparison of their marble work at Spring grove cemetery with that which has been imported from the oldest establishments at the east, will convince our citizens that it is unnecessary to go away from home in order to procure specimens of marble work as good as the best.

Space will not permit us to notice singly all the other establishments, of which there are between twenty and thirty, employing from five to twenty-five or thirty hands each, and whose manufactures add annually large sums to the productive capital of our city.

Monumental Marble Works, 243 Vine street, D. Bolles, proprietor. This establishment, among the oldest in the west, being of some thirty years' standing, is entitled, not so much for its magnitude as for its excellence, to a much larger notice than the limits of this volume will admit.

No pains are spared in getting up the best designs for cemetery work, and equal care is given in the execution of the same, no job of work being permitted to pass out of his hands unless it is well finished, whether it be plain or ornamental, cheap or costly; and the better to enable him to succeed, he employs no more hands, fifteen in number, than he can personally attend to, and those always such as command the highest wages.

His wareroom is ample, and at all times well filled with a great variety of highly finished marble work, such as monuments, tombs, gravestones, tablets, enclosures, and corner posts for cemetery lots, sarcophagi, urns, pedestals, statuettes, effigies of children, doves, lambs, slabs, mantle pieces, fountains, etc., etc., which cannot fail to attract the attention of purchasers and visitors.

Much credit is due him in contributing his full share in building up a branch of business which, within the last few years, has advanced in magnitude and perfection beyond the expectations of the most sanguine, and in artistical excellence will not shrink in comparison with similar work in any city in the world.

About twenty-five thousand dollars in value of manufactured work is turned out annually at these works.

*Mathematical, Optical and Astronomical Instruments.*—Five workshops, mostly on a small scale. Some of them construct instruments with a finish and accuracy that cannot be surpassed elsewhere. Employ twenty hands; value of product, forty thousand dollars; raw material, 50 per cent.

*Mat Maker.*—One workshop, three hands; value of product, eight thousand dollars; raw material, 30 per cent.

*Mattresses, Bedding, etc.*—Fifteen establishments, one hundred and ten hands; value of product, one hundred and eight thousand dollars; raw material, 50 per cent.

*Masonic and Odd Fellows' Regalia.*—Four factories, eighteen hands; product value, twenty-five thousand dollars; raw material, 50 per cent.

*Medicines, Patent.*—Fifteen factories, employing fifty hands, with a product of nine hundred and sixty thousand dollars; raw material, 20 per cent.

*Millinery.*—Three hundred and fifty shops. Number of hands, eleven hundred and twenty; value of work, one million seven hundred and fifty thousand dollars.

*Mineral Water, Artificial.*—This business consists of two classes, one of which is properly termed soda water, and is drawn from fountains by the glass, or sold by the bottle, at places of resort for the purpose, as an article of summer refreshment. The other article is a scientific imitation of the well known medicinal waters of Europe.

The manufacture of soda water, a very refreshing beverage during the heats of summer, has been carried on in this city for some years quite extensively, and the consumption of it at home and abroad, is increasingly great.

Soda water is made by impregnating water with carbonic acid gas, in the proportion of five parts in bulk of one, to twelve of the other; the gas in a fountain of any given capacity, being condensed into a volume of one twelfth its natural space.

It is the expansion of that gas, when discharged, which creates effervescence, and the pungency of the soda water when taken at a draught.

The following is the process of manufacture. The gas is generated in a strong leaden vessel by the action of diluted sulphuric acid, on marble dust—carbonate of lime. It is passed into a gasometer, and thence forced by steam power, acting on air pumps,



into a fountain or the bottles, compressing fifty gallons of carbonic acid gas into the space of seven gallons in an inconceivably short space of time. The safety valve on the machine indicates a pressure of one hundred and fifty pounds to the square inch.

There are ten of these factories here, employing eighty hands; value of product, one hundred and seventy-six thousand dollars. Four fifths of this value is contributed by labor alone.

Another class—the medicinal waters, has recently been introduced into Cincinnati, by Dr. S. Hanbury Smith, long known as a scientific physician here. His establishment is at No. 128 Fourth, west of Race street, where are compounded artificially all the ingredients of Carlsbad, Marienbad, Kissingen and Pymont, in the due and exact proportions of these elements as they exist in their natural localities. These waters have been selected by Dr. Smith as models of their several classes, and afford the necessary variety which the discriminating physician may find it necessary to prescribe. They are kept on draught at this establishment, and are extensively drank on the spot. Besides these, there are Kreutznach, Heilbrunn, Spa, Selters, Ems, and other various mineral waters supplied to order in bottles. There is a rapidly increasing conviction in the public mind as to the value of these waters, and a corresponding increase in their use.

*Morocco Leather.*—Ten establishments for tanning and dressing this article. Three hundred thousand sheep skins are annually converted into moroccos here, which are supplied to the bookbinding, trunk, pocket book, saddlery and shoe trade. During the last eight years, a large share of these skins have been colored cochineal, maroon, and blue, and finished with a high gloss, to adapt them to the finest binding and lining uses. The supply of sheep skins has increased almost ten fold since 1841. The skins, divested of the wool, are worth twenty cents each, and the dressed article commands four to nine dollars per dozen; aggregate value, one hundred and sixty-seven thousand dollars; raw material, 30 per cent.

J. H. Ballance, on the Miami canal, near Race street, tans and dresses forty thousand sheep skins yearly, which are sold for shoemakers' and saddlers' use. Mr. B. is also extensively a wool dealer.

*Mouldings.*—Two establishments, which work sixteen hands, and produce a value of thirty thousand dollars.

*Musical Instruments.*—Pianos are made here in four shops, but

on quite a small scale, as the aggregate of the whole is ten hands, and nine thousand dollars of product value. There is also an organ factory, which employs twenty-four hands, and produces a value of forty thousand dollars; raw material, 40 per cent.

*Music Publishing, etc.*—W. C. Peters & Sons, Nos. 50 and 76 west Third street, are publishers of various works of instruction for the piano, guitar, violin, etc., of which they are the authors, or hold the copyrights. They also issue the newest and most popular music; of which their catalogue presents a variety of solos, duets, trios and glees, adapted to vocal and instrumental use; marches, quicksteps, etc., to the extent of five thousand pieces—a new piece, on the average, being published every day. Of these, the paper is of Cincinnati manufacture, and the engraving and printing are all executed here. The firm supplies eastern publishers, and the business exchange in this line is largely in favor of Cincinnati. Their stock of engraved copper and zinc plates has cost more than one hundred and twenty-five thousand dollars, and they pay out annually three thousand dollars for copyrights; also manufacture ruled paper for copyists. Employ seventy-five hands, and issue a value of two hundred thousand dollars; raw material, 20 per cent.

They import musical instruments of every description from headquarters in France, Germany and Italy. Peters & Sons are the largest music publishers in the west. Their "Eclectic Piano Forte Instructor" enjoys unrivaled popularity, although only before the public for the past three years. The fortieth edition of one thousand copies each has issued from the press.

*Oil, Castor.*—A marked decline in the cultivation for this market of the castor bean, has reduced the value of the oil produced here to thirty thousand dollars. One establishment, five hands.

*Oils—Coal and Cotton Seed.*—Two modern products have been recently introduced here, which promise to make a revolution in material for artificial light, and lubricating purposes. One of these is coal oil, made from the Cannel variety, the other, as the name purports, is expressed from cotton seed.

Coal oil. The manufacture of oils for illumination and for lubricating, from coals, as commercial products, is of recent origin, and limited to the last five years, and mainly to the last two years; but though yet in its infancy, and but partially understood by very few, if fully by any, enough has been learned and developed to

place it in high rank among the valuable gratuities prepared in nature's great laboratory for the wants and comforts of our race.

In common terms and in common processes, Cannel coal yields, benzole, a light and highly inflammable substance used largely in the arts, and in the portable processes of manufacturing gas; next in order, the burning or illuminating oil, being a mixture of the benzole and the unctuous or fatty portions of the oil; next an oil admirably adapted for wool in the picking and carding processes, its properties tending to dissolve the grease and dirt so intermixed with all fine wools; next the heavy or lubricating oil for machinery, which as it runs from the stills is mixed with paraffine, a substance in its nature and appearance corresponding with the best sperm and white wax. These products occur, in varying proportions, in different coals, and no general standard either of general product, or the specific results could be made, the coals from the same vein frequently changing materially in their quality in a few feet. Most coals yield a large quantity of strong ammonia water, a product that will be sought for with earnestness by every farmer who fully understands his true interests, and the value of this fertilizer in connection with spent lime or ashes and barnyard manure. This, with the coke, ends the chapter of products.

There are, probably, in central Ohio, as rich varieties of Cannel coal and as fine deposits as exist any where, and in the only counties yet explored for the purpose, those of Licking, Coshocton, Muskingum, and Perry, it will be safe to estimate there is an area equal to ten miles square, underlaid to the average of three feet in depth of Cannel coal and shale.

This would give four thousand and five hundred tons to the acre, and three hundred and seven millions and two hundred thousand tons to the district referred to, and would, at the low price of five cents to the ton, afford a raw material value of fifteen millions and three hundred and sixty thousand dollars, which, manufactured into oil, and made to yield, as it may, thirty gallons to the ton, would be a product of nine thousand three hundred and sixty millions of gallons, which, at sixty cents per gallon, equals the enormous sum of five thousand six hundred and sixteen millions of dollars. These are large figures, but every reader will acknowledge the five cents per *ton*—twenty-eight bushels—is a low price for an article that will command in any market ten cents per *bushel*, and that almost any burning oil we have cannot be bought at less

than ninety cents per gallon, wholesale. Now to say nothing of the extensive beds of Cannel coal in western Virginia, Missouri, Illinois, and other sections of the west, these four counties form a small proportion of the Cannel coal region of our own State. There is obviously no danger, therefore, of the raw material giving out for centuries.

No substance has ever been used for lubrication that more fully realizes the wants of the mechanical world, when properly prepared for that purpose, and it can be afforded at a much less price than any of the good oils heretofore used.

For illumination there is nothing but gas that can vie with it for brilliancy, and on the score of economy, it takes precedence even of gas.

The following statement, illustrating this point, is made from an experiment of my own, for the purpose of testing the comparative merits of lard oil and coal, simply as a light.

One pint of coal oil, costing twelve cents, has fed one coal lamp during six evenings, for the space of twenty-eight hours, averaging four hours and forty minutes to the evening—the lamp being first placed on the supper table, and afterward transferred to the sitting room table. Two lard oil lamps to each place, were needed heretofore to perform the same service. The cost of lard oil, five cents per evening, and that of coal oil, two cents. But there was not only a cheaper, but a brighter and clearer light. With a ground shade to mellow and subdue the extreme brilliancy of coal oil light, and a regulating screw to the lamp referred to, for graduating the amount, as high a grade of light as is desirable can be obtained, without exposure to the injury which gas and other naked intense lights inflict on the eyes.

There are four coal oil establishments in Cincinnati and adjacencies, all which, aided by supplies from the interior of the State, Kentucky, and Western Virginia, fall short of meeting the demand which has already sprung up for the article.

Newport Coal Oil Company, factory in Newport, opposite the city. Sales here. E. Grasselli, president. Operates on Coal River, Va., coal, of which fifteen hundred bushels are consumed weekly. These works manufacture ninety thousand gallons oil annually; of this, one half is burning oil, the other half lubricating oil and paraffine. There are fifty retorts in operation in



this establishment, and the number will be increased as fast as the demand for lubricating oil becomes developed.

Eugene Grasselli is manufacturing coal oil adjacent to his oil of vitriol works, on Front street, operating on a scale and with a product precisely one half of that at Newport.

The Great Western Coal and Oil Co., of Newark, Ohio, owned principally in Cincinnati and Covington, manufactures, daily, twenty-four hundred gallons coal oil, of which ten per cent. is consumed here. In a few weeks they expect to supply the market with oil to the extent of three hundred thousand gallons annually. Henry Worthington, president. Office, No. 13 Front street, between Main and Walnut streets.

*Cotton Seed Oil.*—For a quarter of a century or more, experiments have been made, in various parts of the country, to accomplish the extraction and purification of oil from the seed of the cotton. Many patents have been granted, and large sums of money lost in these experiments; but until very recently, the results have been anything but satisfactory.

The first difficulty in the way of extracting the oil has been to get rid of the husk, with its coating of fibres that envelops the kernel of the seed, in which, with the starch, gum, etc., destined to nourish the germ of a new plant, the oil is deposited. This difficulty was finally overcome by Wm. R. Fee, of this city, in 1857, by the invention of his cotton-seed huller, which was patented that year, and which has been found in practice to answer all the requirements.

The remaining difficulty was the purification of the oil, after its extraction from the seed. The oil, when first pressed out, is of the color of molasses, containing gum, mucilage, and other protein compounds, which destroy its qualities as a lubricator or burning oil. This difficulty has been partially overcome in Boston, but at great loss of material, and expense of manipulation. This process is in use in New Orleans, and with a modification borrowed from Watts' palm oil processes in St. Louis; but the oil produced is not of a very desirable or marketable quality. And it is to Cincinnati that we are again to look for the perfect solution of the difficulty.

Within the past year, the manufacturers of this city have perfected a cheap and expeditious process for the complete and economical purification and bleaching of the oil, which yields an

article in appearance not inferior to the best samples of fresh olive oil, possessing very superior qualities for burning, and with the advantage of never becoming rancid. Specimens of this oil can be seen in this city, which have been exposed in open vessels to light and air for eighteen months, which are now perfectly sweet and odorless—qualities not to be met with in any other oil that exists. This refined oil also has the advantage of resisting cold to a wonderful degree, remaining limpid at 30° Fahrenheit, and quite fluid at 20°, hardening only at 8 and 10°.

The principal manufactories of this crude oil are at St. Louis, where there is a mill capable of turning out three thousand gallons per week ; and at New Orleans, a mill pressing weekly four thousand gallons.

The process of manufacture, after the seed is hulled, is almost identical with that of linseed oil, and need not be described ; and the cake produced is said to be fully equal to that of linseed, which is always in demand in the great commercial centres, for the feeding of stock, milch cows, etc.

The extent of this manufacture need only be limited by the demand, for the production of seed is estimated at two millions of tons annually—each ton of which will yield one barrel, or forty gallons of oil, making in the aggregate eighty million gallons oil per annum ! This is a prodigious amount, especially when we reflect that scarcely two hundred thousand gallons per annum are made, the remainder of the seed being thrown away, or used for manure on the poorer cotton lands.

From this data, it will be seen that the future of this trade promises enormous results, and that the invention of a good and cheap refining process, such as exists here, is likely to prove of immense value to the cotton planters of the south, and of lasting benefit to the world at large, by giving a permanent value to a great staple product, which has hitherto been regarded, beyond a certain amount, as worse than valueless.

Individuals refine three hundred to four hundred gallons per day, although they are but in the infancy of the business ; value of annual product, one hundred thousand dollars.

Let us now briefly contemplate the extent to which this manufacture must operate on the two prime necessities of the community—food and light. Although the production of the seed will ever be confined to the south, it can hardly be doubted that its

manufacture into oil and cake will be carried on principally, if not entirely, in a region like ours, where machinery and skill are occupied in working out the highest as well as most economical results, and where at the same time, besides being a great central distributing point, facilities of communication and transportation exist in the highest degree.

Without speculating what share of the value of this product, in both its manufacturing and mercantile aspect, shall be created here, it may be worth while to exhibit some calculations of that value itself.

The recent cotton crop has reached, it appears, to three millions three hundred thousand bales of five hundred lbs. each, or eight hundred and twenty-five thousand tons. As the seed is well known to form five sevenths of the whole cotton crop, as respects weight, we have then two millions tons of seed as result. From this deduct for oil, seed and waste one fifth, and there remains sixteen millions tons of oil cake, which, at twenty-five dollars per ton, its very lowest value in competition with other food for horses, cattle, hogs or sheep, at average rates, and the value of that cake reaches forty millions dollars. Add to this sixty millions dollars, as the value of eighty millions gallons oil, and we have an aggregate of one hundred millions dollars, more than one half of the value of the entire cotton crop, even at the present high price of that great staple. What our Cincinnati hullers and oil mills will thus do for the south, may be more fully comprehended by the fact that this entire and increasing product will be gathered from what has heretofore been thrown into the Mississippi as of no value, or merely been used for manure.

*Oil, Linseed.*—Three mills, which employ fifty-three hands, and manufacture a value of three hundred and fifty thousand dollars raw material, 75 per cent.

*Paints.*—There are three establishments here, which manufacture white lead, dry and in oil, litharge, red lead, colored paints, whiting, putty, etc., to the value of four hundred and eighteen thousand dollars. They employ one hundred and eighty-five hands; raw material, 70 per cent.

Wm. Wood & Co., Spring street, between Court and Hunt streets, manufacture white lead, dry and in oil, red lead, litharge, colored paints, castor oil, boiled linseed oil, clarified linseed oil, putty, whiting, cider vinegar, etc., to the value of one hundred and

sixty thousand dollars. They import their chalk direct from England.

*Painters and Glaziers.*—Ninety-four workshops, eight hundred and ten hands; value of labor product, four hundred and fifty-six thousand five hundred dollars.

W. L. Davis, 72 west Third street, north side, between Walnut and Vine, house and sign painter. Sign painting neatly and promptly executed; block letters made to order; gilt lettering on glass; wall paper sized and varnished: glazing, etc.

*Paper.*—Cincinnati having a large book and newspaper publishing business, the manufacture of paper in and for this market, is correspondingly extensive. Seven mills in and adjacent to the city, supply book and news, and three others, wrapping paper, to the value of six hundred and sixteen thousand dollars; raw material, 45 per cent.

Nixon & Chatfield, Nos. 77 and 79 Walnut street, manufacturers and wholesale dealers in paper. Theirs, which is the only paper mill in Cincinnati, is on Bedinger street, east of Broadway. Here is manufactured a very substantial printing paper of fine texture and fair color, made largely from straw, which, together with the cotton rags, is bleached by chloride of lime. In this establishment, two hundred and twenty-five tons straw are annually consumed, and produce a first rate article of news printing paper, of which the Times and Enquirer prints afford specimens. They manufacture a value of sixty thousand dollars, and have the capacity of doing 20 per cent. more. Expect shortly to produce book paper. Work twenty-eight hands; raw material, 30 per cent. The paper is made under Martin Nixon's patent process.

This firm also owns and drives a mill at Clifton, Greene county, where they manufacture for this market, news, book, manilla and unglazed colored paper of the finest quality.

*Pattern Making.*—Most of the pattern makers here are connected with founderies, but the business is carried on, also, for the purpose of getting out new designs for stoves and other ornamental work, the patterns of which are sold in the market to the trade. Value of product, twenty-seven thousand dollars; employ fifty hands.

*Perfumery, Fancy Soap, etc.*—Twelve manufactories, many of which are on a small scale. They employ, as an average, seven-



ty-five hands, and produce a value of one hundred and ninety thousand dollars; raw material, 40 per cent.

*Photographs, Daguerreotypes, etc.*—Forty-five artists, with sixty-eight assistants. Produce to the value of one hundred and fifty thousand dollars; raw material, 60 per cent.

Our daguerreotypists stand high in the ranks of the art. Kellogg & Read exhibited in France and Italy, pictures in this line, taken in Cincinnati, that were recognized at a glance as American productions, and superior to anything of the kind on the continent of Europe.

*Pickles, Preserves, Sauce.*—Two establishments, twelve hands; value of product, thirty-five thousand dollars; raw material, 40 per cent.

*Planes and Edge Tools.*—One factory, employs twenty-five hands, and manufactures a value of thirty thousand dollars; raw material, 35 per cent.

*Planing Machines.*—Three establishments; produce a value of eighty thousand dollars; thirty-two hands; raw material, 30 per cent.

*Plating, Silver.*—Besides silver plating, strictly so called, of which there are four shops, producing a value of twenty-five thousand dollars, there is an equal number of electro-platers, which increase these figures to thirty-five thousand dollars; raw material, 40 per cent.; twenty hands.

*Plumbers.*—Of these there are twenty-four establishments, employing two hundred and ten hands, with a product in value of four hundred and six thousand dollars.

Hugh M'Collum, No. 101 Sixth street, between Vine and Race, has put up the plumbing of the court house and of the new lunatic asylum near Carthage. Employs a new principle in the construction of water closets, especially adapted to lunatic asylums and hydrants. Are such that they never freeze in winter. Manufactures a product of thirty thousand dollars, and employs fifteen hands. Keeps for sale iron and block tin pipes, and the greatest variety and largest stock of plumbing materials of any plumber in the west.

*Pocket Books, etc.*—Two factories, employ twenty hands, and manufacture pocket books, porte-monnaies, bankers' cases, jewelry cases, etc., to the value of forty thousand dollars; raw material, 50 per cent.

*Pork and Beef Packing, Sugar Cured Hams, etc.*—Pork is our great staple, and at no business point in the world does the article exist in greater perfection, either as regards quality, quantity or size. Hogs to the number of four hundred and ninety-eight thousand one hundred and sixty have been put up in a single season, although the average for the last ten years does not exceed three hundred and eighty-five thousand. Last year's crop was a trifle over three hundred and sixty thousand. But the market here is greater than ever, much more than these deficiencies being received in hogs cut up in the vicinity.

There are as many as thirty-three pork packers on a large scale, besides several petty establishments. The number of hands employed in the business averages, annually, two thousand four hundred and fifty, for the various departments.

The amount of beef put up, although inferior in quantity to that of pork, is large, and constantly on the increase. At no point in the United States is a finer article supplied to packers. Value of beef and pork packed and cured here, is six millions three hundred thousand dollars; raw material, 85 per cent.

The following table of weights for hogs packed in Cincinnati and its vicinity, up to 1857, affords some idea of the size and condition of the hogs raised in the west.

|         | Net weight. | Average. |          | Net weight. | Average. |
|---------|-------------|----------|----------|-------------|----------|
| 3 hogs, | 2,031       | 710      | 52 hogs, | 19,604      | 377      |
| 5 "     | 3,200       | 640      | 320 "    | 104,000     | 325      |
| 7 "     | 5,040       | 720      | 657 "    | 200,355     | 305      |
| 22 "    | 8,866       | 403      | —        | —           | —        |
| 50 "    | 18,750      | 375      | 1116 "   | 361,846     | 313      |

These averages, great as they are, have been last season largely surpassed, as follows :

|          | Net weight. | Average. |           | Net weight. | Average. |
|----------|-------------|----------|-----------|-------------|----------|
| 11 hogs, | 6,732       | 612      | 107 hogs, | 43,014      | 402      |
| 20 "     | 15,452      | 772      | 200 "     | 71,800      | 359      |
| 30 "     | 15,180      | 506      | 346 "     | 139,092     | 402      |
| 35 "     | 15,785      | 451      | 400 "     | 150,000     | 375      |
| 35 "     | 15,712      | 449      | —         | —           | —        |
| 43 "     | 15,738      | 366      | 1227 "    | 488,505     | 398      |

These last ten lots, for extraordinary weight, taking quantity into account, have probably no equal, and the lot of twenty, sold by G.

& P. Bogen, and raised and fed for market in our own county, has certainly no parallel in the wide world.

*Pottery Ware.*—Twelve shops, seventy hands; value of product, ninety thousand dollars; raw material, 25 per cent.

*Printing Ink.*—Two factories, employ ten hands, and manufacture a value of twenty thousand dollars.

*Publishing, Book and Newspaper.*—There are six large printing establishments, which issue largely for the periodical press. Of these are the Gazette office, corner Vine and Fourth streets; E. Morgan & Sons, on the Miami canal; the Methodist Book Concern, at the corner of Eighth and Main streets; Moore, Wilstach, Keys & Co., on Fourth, between Main and Walnut; and W. B. Smith & Co., on the corner of Walnut and Baker streets. Besides these, there are several establishments on a less important scale. All of whom, except W. B. Smith & Co., print books, newspapers, etc., to order. In addition to these, there are the various newspaper publishers, who print at their respective offices. The value of these book and newspaper publications is two millions six hundred and ten thousand and fifty dollars; number of hands employed, twelve hundred and thirty; raw material, 50 per cent.

The firm of Robert Clarke & Co., composed of Robert Clarke, R. D. Barney and J. W. Dale, purchased the law publishing and bookselling business of H. W. Derby & Co.—established in 1840—which, adding the senior partner's business as bookseller, stationer and importer, they now carry on at their beautiful and convenient store, No. 55 west Fourth street, between Walnut and Vine, in Carlisle's building. Their publications comprise the most important list of law reports and treatises in the west, as follows:

Kentucky State Reports, 54 vols. in 39.

Ohio Reports, 27 vols.

Nash's Digest of Ohio Reports, 1 vol.

McLean's U. S. Circuit Court Reports, 6 vols.

Johnson's N. Y. Chancery Reports, 7 vols. in 3.

Handy's Cincinnati Superior Court Reports, 1 vol.

Barton's Suit in Equity, 1 vol.

Holcombe's Equity Jurisprudence, 1 vol.

Gwynne on Sheriffs and Coroners, 1 vol.

Swan's Revised Statutes of Ohio, 1 vol.

Swan's Treatise for Justices in Ohio, 1 vol.

McDonald's Treatise for Justices in Indiana, 1 vol.

Nash's Pleading and Practice under the Codes of Ohio, Kansas and Nebraska, 1 vol.

Morehead's Kentucky Practice, 1 vol.

Gilman's Indiana and Illinois Digest, 1 vol.

Taylor's Manual of the Ohio School System, 1 vol.

Stanton's Kentucky Code of Practice, 1 vol.

These alone represent a capital of \$40,000.

Beside the above they have several other important works in press and preparation. They have no manufacturing establishment; but have their books printed and bound by contract, as they require them. Beside their own publications, they have the only regular stock of law books in the city, embracing all the publications of the eastern law houses, and all the State and Federal reports, digests, statutes, etc. Their own publications, especially the reports, which are used over the whole United States, give them peculiar advantages in the way of exchange, by which means they can furnish books of eastern houses at eastern prices.

The distinctive feature of their business, which makes their store the resort of literary men, lovers of fine books and bibliomaniacs, is the importing branch. Their shelves are kept supplied with not only the most important British works in all departments, as they are issued, but an unusual collection of standard, curious and rare old books, fine editions, elegantly printed and handsomely bound books. Their business connection in London is such that they can supply orders for foreign books, either recent or old, very fully and promptly, and we are glad to know that they have met with so much encouragement, that they now make up orders weekly, and receive returns in from six to ten weeks, according to the season.

They are special agents for the well known houses of Routledge, Warnes & Routledge, and J. Novello — music — London, and Blackie & Sons, Glasgow, whose list embraces very superior classes of works; and also keep a regular supply of the publications of T. & T. Clark, and T. Nelson & Sons, Edinburgh, and H. Bailliere, London. They are also in regular receipt of the catalogues of over a hundred of the old book dealers of London, Edinburgh, Dublin, and the principal provincial cities of Great Britain, and Ireland, from which they import selections, thus affording rare opportunities of procuring old, curious, out-of-the-way books, as also music, coins and autographs.



They receive subscriptions for British and French periodicals. Their theological department is very complete, embracing American and British works, both *in* and *out of print*, from the ponderous folios of the old divines, to a choice collection of the little volumes suitable for Sabbath school libraries.

The medical profession are indebted to this house for first supplying them with the latest and best of the British and French works pertaining to their profession, which, with all the standard American medical works, gives them an attractive stock in that department. Their scientific, mechanical, mathematical, classical and school departments include all the important works in the various branches.

A peculiarity in their stationery business is their trade in steel pens and lead pencils. Of the former they have twelve excellent varieties, manufactured for them in Birmingham, England, bearing their imprint. Of the latter they have thirteen qualities, most of them each having four or more degrees of hardness. Those are manufactured expressly for them near Nuremberg, Germany; these also have their imprint stamped on them. The finer qualities are fully equal to the celebrated "Faber," as is testified by many of the artists and drawing teachers of the city, by whom they have been used.

Applegate & Co., booksellers and publishers, 43 Main street. This is a long-established house, which carries on the publication of books with great spirit, and on an extensive scale. They publish, probably, a greater number of large volumes than any other house in the trade—such as Clarke's Commentary on the New Testaments, etc. Of this work they have issued forty thousand copies. The works of Dr. Thos. L. Dick, eighty thousand; Plutarch's Lives, thirty thousand; Spectator, fifteen thousand; Rolin's Ancient History, seventy thousand; Mosheim's Church History, ten thousand; Speeches and Writings of Hon. T. F. Marshall, ten thousand; Works of Lorenzo Dow, twenty thousand; Dick's Theology, five thousand; Chain of Sacred Wonders, four thousand. In addition to these, large editions of various publications of lesser size, one of which, Elements of the German Language, by Professor Soden, has reached its *eighty-sixth* edition. They publish largely for authors, not enumerated here, of our own region and age.

W. B. Smith & Co. This is our oldest Publishing house, having, with a slight modification of its firm, existed here for nearly twenty-five years as Booksellers and Stationers. Its enterprise and energy have always kept pace with the giant strides, to greatness, of Cincinnati.

They are now, and have been for years past, the most important publishing house in the United States, in their line—that of educational books in their various departments. Theirs is known as the Eclectic Series of School Books; and as the common schools are the glory of the whole land, so this Series is the efficient engine of the common schools, for diffusing popular knowledge through the entire West, at least. From the Allegheny mountains to the Pacific coast, and from the Gulf of Florida to the great Northern Lakes, these school books are in general use, having been prepared for publication as the mature experience of some of the most distinguished instructors of the age. This Series, under successive revisals and improvements throughout its use for the past twenty-five years, now embraces what may be termed the great standard educational lessons for primary and common schools, as well as higher seminaries of learning—forming manuals of instruction for every class of pupils.

There is no higher evidence of their merit, than the great fact, that two millions of these volumes are published annually, affording class books to five hundred thousand pupils, or more than two-thirds of the whole number under educational influence or instruction west of the Alleghanies.

There can be no doubt, they are justly entitled to the liberal favor with which they are regarded; for the most scrupulous care has been exercised in their selection, and no expense or labor spared in improving and perfecting them; while it has been a leading object, and one worthy of all commendation, so to economize the cost of manufacture, by adopting all the improvements of labor-saving steam machinery, as to furnish them to schools at the lowest prices admissible.

Messrs. Smith & Co. have always, and persistently refused to add to their list of Educational Works, only so far as they could procure those of the highest value, in their moral tone and intellectual influence.

Under the widely extending and rapidly increasing business of this firm, during late years, they have been obliged to seek more

facilities, to meet the wants in this line, of the community. They have accordingly constructed three spacious and commodious buildings on Walnut and Baker streets, whose close contiguity to each other, renders them efficient means of carrying on every department of their business to the best advantage. One of these, and the principal one, faces on both the streets referred to. The main exterior is of iron, gothic style of architecture, and presents a massive and solid front. The building is one hundred feet long, and five stories high above ground. The first story is the business room. Above and below, the books are carefully stored, and clerks and porters are constantly employed in packing them for forwarding and shipment.

The second building is in the rear of, and connects with, the first, through arched passage ways, closed by double sets of iron doors. It fronts on the south side of Baker street, and is thirty-two by eighty-four feet, and six stories high. The lower story is level with Third street, from which it is accessible by a private alley, and through which are received the enormous quantities of printing paper used by the establishment. This paper is forwarded on a steam railway through this building, and, by a subterranean passage under Baker street, to the printing-house. The upper stories of this second building are occupied entirely by the bindery. In one room neatly-dressed, intelligent females are engaged in folding the sheets—in another, arranging them in proper order—and in another, stitching and sewing them, with the aid of machinery. From their hands, the half-finished volumes pass to the binder, who completes the work; and then, steam forwards the finished books to the store-rooms.

The third building is on the north side of Baker street, and is connected by a subterranean tunnel with the other buildings. To the left of this tunnel, beneath the street, fire-proof vaults have been excavated, walled up and arched over by solid masonry, in which the valuable stereotype plates of the firm are deposited, and where they are secure from accident and injury.

The north building is forty, by ninety feet, and six stories high, with an apparatus in the centre of the stairway, for hoisting or lowering, by steam power, the contents of one story as it may be needed in others. The steam engine and wetting machinery occupy the cellar, or front story; the entire floor of the second story is filled with power presses, which are driven by steam, and can

throw off seven hundred and fifty impressions, each, per hour. These are arranged in perfect order, standing side by side, and forming lines, which extend down the long rooms, where, from morning till night, day after day, and month after month, they toil unweariedly on, multiplying the means of instruction and intelligence to thousands upon thousands of the children of the land.

Order, system, and perfect execution of duty prevail here, as in all other portions of the establishment. Above the printing rooms is another branch of the bindery.

These buildings are models in their way. The visitor is deeply impressed with the cleanliness and order witnessed in every department, and the quiet air that prevails throughout. The proprietors have spared no expense in providing every convenience and comfort for the operatives. To the female departments are attached neat and pleasant dressing-rooms, rendered every way convenient and set apart for their use exclusively.

The best plans have been consulted as to light and ventilation, so essential to health, and the rooms are remarkably pleasant and cheerful. The buildings are fire-proof, and are heated throughout by steam, conveyed through iron pipes to every room of the establishment, rendering the different departments uniformly warm and comfortable, for the great number of persons to which the house gives employment.

These details have been entered into with more minuteness than would otherwise have been deemed expedient, because the moral and educational influences of this establishment are of vast public importance, and radiate from Cincinnati, as a centre, all over the Union. Wherever children congregate, in their far-away school-rooms, or by the happy firesides of home, sit down to learn their lessons out of Eclectic School Books, there this influence is active, and none may measure the untold good it is accomplishing. This establishment, devoted exclusively to the diffusion of useful knowledge in the various branches of elementary education, may be regarded as a great benefactor of the youth of our land. In it, talent, capital, and the improvements of steam machinery are combined in producing School Books for the million, and, with commendable fidelity, furnishing them at the least possible cost.

An enterprise so wisely planned and ably carried out for supplying the children of the Free Common Schools of the country with excellent, high-toned, moral, and instructive elementary class-



books, richly deserves the highest credit, and a widely extended patronage.

This firm has electrotyped their entire Series, by which means no typographical error can exist, to mar the text or to offend the taste of the most fastidious teacher.

W. B. Smith & Co. employ, in the various departments of their publishing business, one hundred and twenty hands, and consume twenty-four thousand reams of the largest size printing paper annually, at a product of four hundred thousand dollars.

Moore, Wilstach, Keys & Co., No. 25 west Fourth street, successors to Wm. H. Moore & Co., and Phillips & Co. This firm is the pioneer establishment in Cincinnati of general publishing literature, and is, and for years has been one of our most important book publishing houses, their business perhaps exceeding the entire aggregate of the twelve houses engaged in 1850, in producing other than school books.

The rapid increase of their business keeping pace for the last ten years with the enlargement of Cincinnati itself, had compelled them to remove from their former location on Main street, and rendered it necessary for them to lay broad and deep business foundations for the future, in extensive and convenient arrangements for heavy operations. Accordingly, in 1854, the present spacious building on the south side of Fourth, between Main and Walnut streets, was erected for their occupation and use, having been arranged and planned expressly for the various departments of printing, binding and salesrooms of a publishing establishment on a large scale. Its size is thirty-four feet by two hundred; the ground floor being occupied as salesrooms, the basement by a steam engine and the book and job presses, which it drives. A sub-basement beneath forms a wareroom. The printing office and bindery occupy five stories, being in single rooms to the entire floor, thirty-four by one hundred feet, all well lighted—warmed by steam—the printing office supplied with beautiful fonts of book and job type in every variety, and warranted by the agency of ten Adams' and other book and job presses, to execute work of either kind in the highest style of the art.

They have been prompted by their various facilities to devote special attention to the production, on the largest scale and in the greatest variety of patterns and styles, of blank books; itself one of the most important branches of the stationery business, as well

of the more ordinary as of the finer grades, adapted both for the use of the mercantile classes here and to the country trade. The manufacturing department is under the supervision of C. F. Wilstach, of the firm, who proposes to produce all styles of blank books, and especially the finer qualities of paged work, to order, for merchants, bankers, county officers, insurance and railroad companies; and, also, to bind printed work, in various plain and ornamental styles of binding.

The machinery is all of modern and approved construction, and, as far as possible, worked by steam—thus giving every facility for producing at the lowest possible cost.

Moore, Wilstach, Keys & Co. are agents for the sale of various finest styles of paper, unsurpassed for quality of material and excellence of finish, made expressly to their own order; and have constantly for sale the usual assortment and variety, of general stationery.

The publishing department of this establishment occupies a wide range of subjects in the religious, medical and miscellaneous literature of the age. In the first class are family Bibles, embracing forty varieties, from the lowest price to the highest quality in paper and style of illustration and binding. One variety is embellished with handsome engravings and lithographic illuminations. Those of the finest style of binding are handsome centre-table ornaments. Some of these are sold at prices below those of corresponding descriptions by the Bible depositories.

Two years since, this firm published "*Bayard Taylor's Cyclopaedia of Modern Travel*," an octavo volume of about 1000 pages; an intensely interesting digest of the discoveries and adventures of the celebrated travelers of the present century, prepared by one who has no living superior in qualifications for such a labor; the work is well illustrated by maps and engravings. A new edition, considerably enlarged by adding the more recent discoveries of Barth, Livingstone, and others, will be brought out the coming autumn. The compiler has already received as copyright on sales, several thousand dollars.

About the same period they will issue a handsomely illustrated and very important work to western agricultural interests, written by J. H. Klippart, *Secretary of the Ohio State Board of Agriculture*, entitled "The Wheat Plant, its origin, varieties, diseases, etc., etc., with a few remarks on Indian corn, its culture, etc."

A few weeks since, they issued the fifth edition of "*The American Dispensatory*," 1 vol. 8vo.; and are now bringing out new editions of the works of Beach, the well known medical reformer, comprised in six or seven large volumes. Some of these have passed through *forty editions*, of a thousand each. His large work, in three volumes, costs twenty dollars. They have just issued "*Oriola*," a *Hymn and Tune Book*, by Bradbury, of New York, brought out under the sanction of the Cincinnati Sunday School Union, and admirably adapted for Sabbath Schools.

Their medical publications comprehend the writings of the most diligent authors of the present age, in the popular and progressive literature of this subject, embracing well known works in demand throughout the whole United States, of the various schools, Regular, Eclectic, Reformed and Homœopathic.

They are, also, prepared to contract for manufacturing books or pamphlets, for authors or others, in the handsomest typographical styles, and bound in any usual manner to suit the tastes of those who desire to publish on their own account.

As to the building itself, there is no finer one of the business kind in the city, as respects its exterior, among the costly erections of 1858 and 1859. It has, in fact, given the impulse to that style of construction in fronts which has filled up Pearl, Walnut, Vine and Fourth streets with the splendid erections of the past five years, to most of which it has served as a model, and to all of which it has in hints and improvements, suggested the outlines.

The publications of Moore, Wilstach, Keys & Co. are on an extensive scale, and the materials, means and results correspond accordingly. They employ one hundred and thirty-five hands, and the aggregate products reach a value of two hundred and seventy-five thousand dollars.

Anderson, Gates & Wright, Main street. This is also a large publishing house, but being of more recent establishment than those already referred to, the extent and variety of their business will not compare with the largest. They are engaged principally on miscellaneous literature, such as the *Arabian Nights'* Entertainments, *Life of Daniel Boone*, *Pilgrim's Progress*, *Life of Lorenzo Dow*, and various other works of the same class. They are doing an increasing business in this line to the value of thirty thousand dollars, besides a large general stationery business.

*Pumps, etc.*—One factory, with twenty-five hands, and a product

of thirty thousand dollars, where are made hoisting and pumping engines, vertical, steam and double acting pumps, hose nozzles and couplings, etc.

*Railway Chairs, Spikes, etc.*—F. P. Corby & Co., west Front street, at the junction of the Ohio and Mississippi, Cincinnati, Hamilton and Dayton, and Indianapolis and Cincinnati railroads. Here are manufactured wrought iron railway chairs, spikes, hot pressed nuts, bridge bolts, boiler rivets, etc., on a large scale.

The machinery of the works comprises one large Patent chair machine, one large and powerful vertical shearing machine, for cutting the chair plates; two powerful punching machines, on the toggle joint principle; four of Burden's patent spike machines, the largest size made; and three large rivet machines for manufacturing boiler and other rivets, besides smaller machinery for manufacturing bolts, nuts, washers, etc.

The machinery is wholly driven by an engine of about forty horse power, and the steam for this engine is generated entirely by the waste heat from the chair furnaces.

The chair machine has a capacity for turning out from nine to twelve tons of chairs daily. The chair is finished from the blank plate at one operation, or one revolution of the machine. In this process of manufacture, the plate undergoes at the same instant, the double operation of being cut and bent over, and in such a manner that the lips are made considerably thicker at the base, or where the greatest strength is required, and the liability of straining at the bend entirely obviated. So great is their superiority, that one of these chairs weighing eleven lbs., is equal to the ordinary article of thirteen lbs. weight.

These chairs, as they are technically called, are clamps by which the rails are firmly secured to the railway ties, on which they are spiked. They are nearly eight inches square, and from three eighths to seven eighths inch in thickness, and such is the accuracy as well as the power of the shearing machinery, by which they are cut, that a chisel passes through these iron bars, which are eight inches broad by three fourth inch thick, with less apparent effort than is made by a carpenter pushing a sash chisel into soft pine, and exhibiting an edge to the chair as smooth as if planed. This machine can cut up twenty tons iron daily.

One great advantage which the manufacturers claim over the rolled chair is, that the lips are cut and bent across the grain of



the iron, while in the rolled chair they are formed in a line with the grain; consequently, as the deflection of the chair in use is greatest through the centre, lengthwise, the latter is more liable to part or break. By the spike machines, about fourteen tons of spikes may be manufactured daily, and of any desired pattern.

The rivet and bolt machines can turn out sixty pieces per minute. None but the best quality iron, such as Hanging Rock, Missouri, and Tennessee, is used at these works. And it is a striking instance of the reciprocal advantages of the department of manufactures, that this establishment supplies with these various railway materials the region of country from which they derive their identical raw materials. The facilities enjoyed at this establishment for receiving iron and shipping goods, are apparent. They have both a river and canal front, and the works are convenient to the tracks of all the railroads.

Corby & Co. employ thirty-five hands, and manufacture a value of three hundred and sixty thousand dollars; raw material, 70 per cent.

*Ranges, Cooking, etc.*—Three establishments, employ forty-five hands; value of product, seventy-five thousand dollars; raw material, 40 per cent.

*Refrigerators.*—Two factories, employ eighty hands, and manufacture a value of seventy-five thousand dollars; raw material, 60 per cent.

*Roofing, Tin, Composition and Metallic.*—Eighteen factories, employ one hundred and fifty hands; value of labor product, three hundred and sixty thousand dollars.

Caldwell & Co., 132 west Second street, are proprietors of the Outcalt roofing patent. This is a sheet iron roof, in the preparation and construction of which ample provision is made for allowing the material to undergo its usual contraction and expansion, without affecting the permanency of fit and imperviousness to water of the covering. This is done by scrolling the edges of the sheets, which are then encased one within another, and the whole fastened by cleets to the board sheeting which is to receive it, these cleets being again covered by the roof. The entire surface of this roof is covered with fire-proof paint, before being put up, which resists the action not only of water and fire, but is so little affected by atmospheric or other influences, as to bear on its surface without injury, the severest tests of sulphuric acid, either diluted or

concentrated. In lightness, it has the advantage of all other roofs, tin excepted, and it is not one fourth the weight of a shingle or composition roof. Its durability, in view of the material employed, has hardly any assignable limit.

So simple is the application of this roof, that any man of ordinary mechanical knowledge can put it up without difficulty, which gives the article great advantages over ordinary roofing. The proprietors allege that when they once get the roof introduced into a neighborhood, it forms the best local advertisement they desire.

This establishment employs sixty hands, and manufactures an annual value of seventy-five thousand dollars.

Christopher & Beall, 378 Main street, put up tin, copper and sheet iron roofing on the most favorable terms. All work warranted. Job work of all kinds in tin, copper and sheet iron. They employ sixteen hands, and execute work to the value of thirty-six thousand dollars: raw material, 65 per cent.

*Saddlery, Collars and Harness.*—Fifty-six shops, employing three hundred hands, and producing a value of six hundred and sixty-three thousand dollars; raw material, 50 per cent.

Wilson & Hayden, 22 and 24 Main street, manufacturers of saddlery and coach hardware, carriage trimmings, saddle trees, hog skins; are engaged in the handling and finishing of saddle and harness leather, which they make to the value of two hundred thousand dollars; saddle trees and saddlery hardware, to the value of one hundred thousand dollars; raw material, 80 per cent. Their annual sales of saddlery, etc., including those of their own manufacture, extend to five hundred thousand dollars.

The store rooms which they occupy form one of the most spacious business buildings in Cincinnati, being thirty-two feet in front by two hundred feet deep, and five stories high, with a two-story warehouse adjoining the rear. To the public spirit of Mr. Wilson, Cincinnati owes the erection of the fine block two hundred feet by one hundred feet, which adjoins south on Main extending to Front street.

*Saddle Trees.*—One shop, with five hands, manufactures ten thousand dollars of value; raw material, 50 per cent.

*Safes, Vaults, etc., Iron.*—Two establishments of nearly equal importance; employ one hundred and thirty-five hands, and manufacture a value of four hundred and eight thousand dollars annually; raw material, 45 per cent.

Wm. B. Dodds & Co., late Urban, Dodds & Co., office and sale room, southwest corner Vine and Second streets. This establishment has existed for the past fifteen years, during which time it has grown from a small workshop of eight or ten hands, and a product of fifteen thousand dollars, to its present extensive operations. The factory is located on the south side of Pearl street, west of Elm, and embraces the occupancy of a building measuring on the ground sixty-five by one hundred feet, and four stories high, besides the basement.

This establishment makes safes of every description, but is devoted especially to the manufacture of heavy bank and mercantile safes and vaults, and the articles it produces cannot be surpassed anywhere. They are provided with an interior safe or sub-treasury, made of plates of iron and hardened steel, and secured with locks of the most approved manufacture; the inner doors with a Bramah lock, and the outside doors are doubly secured against the efforts of the most adroit thieves.

Locks for these safes are made on the premises, and are so constructed and protected as to be alike burglar and powder proof.

These safes have been thoroughly tested as to their capacity in resisting the flames, are impervious to damp, and have come out of the severest trials with their contents uninjured in every instance.

The full capacity of the works requires the employment of about one hundred hands, with which force they can turn out from five to six safes per day, having an average value of one hundred and fifty dollars each.

*Sash, Blinds and Doors, and Portable Houses.*—Twenty factories, the larger share being hand operations. Value of product, thirteen hundred and eighty thousand dollars; raw material, 25 per cent.; employ four hundred and ten hands.

*Sausages.*—Twenty-eight shops, one hundred and eighty hands. Value of product, two hundred and fifteen thousand dollars; raw material, 50 per cent.

*Saved Lumber, Laths, etc.*—Twelve mills, one hundred and fifty hands; manufacture a value of eight hundred and twenty thousand dollars; raw material, 35 per cent.

*Saws.*—Two factories, employ thirty hands; manufacture circular, cross-cut, mill, billet and web saws, plastering trowels, etc., to the value of ninety-five thousand dollars; raw material, 70 per cent.

*Scales, Platforms, etc.*—There are seven factories here, at which scales with or without platforms are made. Forty hands; value of product, eighty-five thousand dollars. These consist in hay, platform and counter scales, brass and iron scales, beams, skids and truck wagons.

*Screw Plates.*—Three factories, eighteen hands; value of product, twenty-one thousand dollars.

*Shirts, etc.*—Twenty-five workshops, which employ two hundred hands, all females; value of product, five hundred and seventy-five thousand dollars; raw material, 60 per cent.

*Show Cases.*—Two shops, employ six hands, and manufacture a value of six thousand dollars.

*Silver and Goldsmiths.*—Five shops, fifty hands; value of product, one hundred and ten thousand dollars; raw material, 75 per cent.

*Spokes, Felloes, Hubs, etc.*—Royer, Simonton & Co., 375 west Third street. This is a very spacious establishment, comprehending a variety of buildings for manufacturing the various component parts of carriage wheels, etc., for fitting and finishing, and warehousing the manufactured articles.

This factory is undoubtedly the largest of the kind in the world. The yearly product of spokes is about one million; of felloes, one hundred and sixty thousand, and sets of shafts and bows in proportion. The building in which these are manufactured is ninety by thirty-three feet, consisting of nine rooms, which are crowded with machinery and workmen. This is on the lower side of Third street, and nearly opposite to which is a building three stories high, and thirty-five feet by eighty feet on the floor, in which the finishing work is carried on.

Carriage and buggy hubs are made of gum and elm, and wagon hubs of locust. Of these, more than two hundred thousand are annually made. Of the spokes, six thousand are made and finished daily. The timber for the spokes is hickory and oak, principally hickory, and the felloes, shafts, poles and bows are made of hickory, ash and oak. Every stick of timber used here is selected in the woods, a small proportion only of what grows of these several species being adapted for their purposes, as the very best alone is put to use. One hundred hands are constantly occupied in the labor of getting out suitable timber for this establishment.

None of the products of this factory are put together until they



have undergone in the first place a steaming, and afterward a six months' seasoning process.

They work eighty hands, and produce a manufactured value of one hundred and twenty-five thousand dollars.

*Stained Glass.*—Two shops, which employ six hands, and manufacture a value of nine thousand dollars.

Painting in glass, which is another name for stained glass, is one of the long-lost, but finally recovered arts of antiquity. It is carried, in modern times, however, to a degree of perfection unknown to the ancients. Glass of this description is employed extensively in churches and in the finest class of private dwellings, where it serves admirably to distribute a mellowed light, more grateful to the eye, than that which passes in its full strength through perfectly transparent glass.

Stained glass is prepared by coating one side of the plate with phosphate of lime in a flux of pulverized glass, in cases where it is designed to render the plate semi-opaque or obscure. This gives it the appearance of being ground on one face. Where the various brilliant colors are sought, oxydes of almost all the metals, such as iron, zinc, tin, antimony, cobalt, manganese, lead, silver and gold, are the agents resorted to; silver being the base of the yellow, as gold is of the purple, and cobalt of the blue. The coating, in a liquid state, being brushed over the surface of the plate, and lime sifted over it to prevent the adhesion of the glass, the plates are lodged in a furnace, where they are submitted to a degree of heat which blends the coloring matter with the outside of the glass, which is then suffered gradually to cool to its final and permanent temperature.

The white color is imparted by grinding figures upon glass made transparent, and colored on one side in the first instance, the grinding barely penetrating through the colored side.

*Starch.*—Six factories, which employ fifty hands, and make a value of two hundred and thirty thousand dollars.

Starch has heretofore been made principally from wheat, and a portion of it is still made here from that grain. Of late years, Indian corn has been resorted to in the manufacture of starch, and with great success, although the discovery is comparatively recent. Yet it is found to contain almost as great a proportion as wheat. The per centage of starch, in the best varieties of corn, is about 60 per cent.; nitrogenous substances, 15 per cent., with a consid-

erable portion of sugar, and 10 per cent. of oil and gum. All practical men are well aware of the great superiority of corn over every other kind of grain for fattening purposes.

The amount of starch, in sweet corn, is very small, not over 18 or 20 per cent.; but the per centage of sugar is very great. The nitrogenous matter about 20, gum 14, and oil 11 per cent. If it could be made to yield as much per acre as the more hardy kind, it would be the most profitable, because the most nourishing of all the varieties.

*Steamboats.*—There are three steamboat yards. The building of steamboats has been declining here for years, but there is still, and always will be, a large amount of repairing and refitting boats which transact business here, as most of those on the Ohio do. Building and repairing employ four hundred hands; value of product, four hundred thousand dollars.

*Stocking Weavers.*—Four shops, eighteen hands; value of product, eighteen thousand dollars; raw material, 50 per cent.

*Stone Cutters.*—Twenty yards, employ two hundred and thirty-five hands; value of product, including the setting in the wall, eleven hundred and twenty-five thousand dollars; raw material, 20 per cent.

The building stone in general use here is brought from the Scioto free stone region, limestone costing too high in the transportation, sawing and dressing, for general building purposes.

*Stone Masons.*—Fifty builders, employ four hundred and thirty-five hands. Value of labor product, seven hundred and seventy-five thousand dollars.

*Stucco Workers.*—Four shops, sixteen hands; value of product, eighteen thousand dollars.

*Sugar Refineries.*—Of these there are four, all recently established. They work one hundred and six hands, and refine forty thousand lbs. per day. Value of the refined sugar, seven hundred and fifty thousand dollars; raw material, 75 per cent.

*Tailoring.*—Of those who make to measurement, we have one hundred and sixty merchant tailors, who employ one thousand three hundred and forty hands, exclusive of women who sew at their own dwellings. These produce to the value of two millions and thirty-five thousand dollars.

*Tanners and Curriers.*—This department embraces thirty establishments, which employ three hundred and eighty hands, and

manufacture a value of one million five hundred and twenty thousand dollars.

*Tapers.*—The American Taper Company, factory 50 east eighth street, west of Broadway ; office, northwest corner Race and Second streets ; has introduced a new and very superior light-producing article, which for efficiency and convenience excels all others, and is free from objections that exist against most kinds of matches now or lately in use. The first apparatus for striking a light was a flint and steel. Upon this it was thought a great improvement was made by the invention of the brimstone match, dipped in sulphur at both ends. Next followed the phosphorus bottle, into which matches tipped with chlorate of potash were inserted. Lastly came the article of matches dipped in sulphur and coated with phosphorus in combination with nitrates and chlorates. To all these existed various objections. Some lost their strength by exposure, others required the aid of fire to produce light, and while none of them were perfectly reliable, all had an odor extremely offensive, if not prejudicial to health, affecting the atmosphere in which they were used or even kept.

The tapers now offered for sale by this company are as cheap as the cheapest of other kinds, produce an instantaneous and reliable igniting light, and are safe, convenient, odorless and unaffected by dampness or age.

For the use of persons called up at night to get or find medicine or other necessary article on the spur of the moment, these tapers form a special convenience. They can be carried in the hand for one minute at least, a space of time usually long enough to perform these purposes. This company manufacture five millions of tapers daily, and have a capacity of making four times that quantity. They work thirty hands, with a product of ninety-three thousand six hundred dollars.

*Terra Cotta Work.*—One factory, eighteen hands ; value of product, twenty-five thousand dollars.

*Tobacco, Cigars, etc.*—This business comprehends, first, those who in this city and in Covington manufacture tobacco in the wholesale line exclusively. Second, of those who make fine tobacco for regular customers ; and third, of various factories, principally on a small scale, in which cigars and snuff are the main articles.

There are ninety-three tobacco manufacturers here. Of these, forty factories in the wholesale line, employ one thousand five hun-

dred and fifty hands, principally boys ; value of product, ten hundred and sixty-five thousand dollars. The residue work four hundred and sixty hands, not including boys, and manufacture to the value of six hundred and two thousand dollars ; raw material, 55 per cent.

*Trunks, Valises, Carpet Bags.*—Of these there are twelve factories, employing two hundred and seventy-five hands, with a product value of six hundred and fifty thousand dollars.

*Trusses, Braces, Belts.*—Eight factories, employ sixty hands, and manufacture every species of supports and mechanical remedies for natural deformities, and diseases affecting the spine or lower limbs. Value of product, fifty-six thousand dollars.

*Turners.*—Eighteen shops, fifty hands ; value of product, ninety-five thousand dollars.

*Type, Stereotype, Electrotpe and Printing Materials.*—There are five establishments here, some of which cast type and stereotype plates, without furnishing general printing materials, but most of them supply every article in this line. Two hundred and twenty hands employed, with a labor product of three hundred and ten thousand dollars.

*Undertakers.*—Twenty-four establishments, of which several are small. Most of these furnish coffins for funerals, in addition to carriages. Fifty hands ; value of product, one hundred and forty thousand dollars.

*Upholstery and Window Shades.*—Eighteen factories, which employ two hundred and ten hands, with a product of one hundred and sixty thousand dollars in value ; raw material, 50 per cent.

*Varnish, Copal.*—Three varnish factories. These employ sixteen hands. Value of product, two hundred thousand dollars.

*Veneers.*—H. Albro & Co., 196 west Pearl street, between Elm and Plum. Here the spectator will behold saws of such tremendous power as to cut the hardest woods with great celerity and perfect ease, and others operating with such mechanical exactness as to cut fifteen veneers to the inch—cut so thin as to fold to any desired shape, and so exact as to bear the plane over their entire surface.

Heretofore, the great bulk of the veneers used or sold in this place has been brought from the east. In making them here, two important advantages result — they are bought cheaper, and the cabinet makers can get them of the first quality, as cut up from the



log, whereas at the east the best selections are made by the piano makers working on the spot.

In former years, foreign woods were principally in demand for furniture—as rosewood, zebra and mahogany. But the beauty of our American woods—the black walnut, cherry and curled maple—has of late brought them extensively into use, and so generally are they becoming preferred for furniture, that veneers of these kinds are as valuable now as are those of mahogany, except of the very finest crotch pieces.

This firm works twenty hands, with a product of one hundred thousand dollars in value.

*Vermicelli, Macaroni, etc.*—Four factories, ten hands. Product value, twenty-four thousand dollars.

*Vinegar.*—Twenty factories. The entire vinegar manufacture employs eighty hands, and reaches the value of two hundred thousand dollars; raw material, 40 per cent.

*Wagons, Carts, etc.*—Fifty-two shops, one hundred and seventy hands. Value of product, two hundred and ten thousand dollars; raw material, 40 per cent.

*Wall Paper Stainers and Hangers.*—Two factories, employ thirty hands; value of product, eighteen thousand dollars.

*Ware, Earthen and Potter.*—M. & N. Tempest, Hamilton Road, head of Elm street. This firm does by far the largest business of any pottery in the city; employs thirty to forty hands, and carry on their business with a great deal of that spirit of enterprise which, when coupled with judgment, almost invariably insures eminent success. Here a great variety of yellow and Rockingham ware is manufactured, consisting, among many other articles, of bowls, pitchers, jars of all kinds, milk dishes, baking dishes, spittoons, teapots, ewers and basins, many of which are chaste and elegant in design, and all of excellent quality.

Messrs. Tempest have recently purchased the exclusive right for this market, as also for about seven eighths of all the counties of Ohio and Indiana, to “Dayton’s Patent Air Exhauster,” a very valuable invention for putting up fresh fruits and vegetables, by means of consuming the air by combustion.

The process is simple, ingenious, and effective, insuring the safety of every can—a thing hitherto found impracticable—and can boast of producing fruit fresh, firm and delicate, owing to the fact

that instead of being partially cooked by boiling, no higher degree of heat need be attained than 180°.

This firm also manufacture an immense quantity of their air-tight fruit jars, which are of an octagon shape, glazed outside and in, and twice exposed to white heat for about twenty-four hours each time. They are as close in their fabric as glass, incapable of breaking by heat, will bear any amount of transportation, and, if desired, will be found very useful for household purposes.

The proprietors of this establishment are men suited to the times, being alive to every improvement, and well qualified to carry into practical operation everything in their line of business calculated to add to the economy and comfort of the public.

*Washboards, Zinc.*—Two factories, employ ninety hands, and produce a value of two hundred and ten thousand dollars; raw material, 50 per cent.

There are more washboards made in Cincinnati than in any State of the Union, or any city any where.

*Whisky.*—This is the great whisky mart of the whole world. The article is manufactured for the Cincinnati market for several miles up and down the Ohio, along the lines of the Miami and Whitewater canals, along those of the Little Miami and Cincinnati, the Hamilton and Dayton Railways, and within the city and its suburbs, to the extent of sixteen hundred and fifty barrels per day, as an average for the working days of the year. Yearly value of product, five millions three hundred and fifteen thousand seven hundred and thirty dollars; raw material, 65 per cent.

*Wigs.*—Three shops, seven hands; value of product, ten thousand dollars.

*Wine and Brandy, Catawba.*—Cincinnati has become almost as well known abroad for the manufacture of wine as for that of bacon and pork, and eventually, there is no doubt, it will become the more important of the two, as regards the extent and profit of the business. In the various stages of wine growing and making, not less than eight hundred persons are employed; value of product in favorable years, six hundred thousand dollars; raw material, 25 per cent.

In addition to wine manufacturers who produce a common article merely, there are seven or eight individuals whose brands have already become known and approved abroad, or who are preparing for the production of superior wines, principally from the catawba

grape. Of these, Longworth is the oldest and best known. But there are others who make fine wines. Among these are R. Buchanan, G. & P. Bogen, T. H. Yeatman, and M. Werk, whose wines have been for several years in market, and find purchasers at remunerating prices, as fast as they can be made ready for sale. All of these make still catawba, and most of them sparkling catawba, which comes in competition to the French champagne, which it undoubtedly excels.

Although the grape crop for the last three years, has fallen short greatly of the average yield, owing to unfavorable weather in certain stages of growth, yet there is a steady increase in the number of acres devoted to vineyard purposes.

One of our city nurserymen alone sold last year one million of cuttings, of the catawba, which would suffice to plant three hundred acres, and Wm. J. Flagg, who has had charge of Mr. Longworth's wine business for several years past, has recently planted four hundred thousand cuttings in the freestone region of the Scioto. This is the largest grape nursery extant.

Such is the present extent of vineyards in this vicinity, that if they were all in bearing order, and with a full crop this year, they would yield one million five hundred thousand gallons wine.

Owing to the comparative failure of the grape, Cincinnati alone consumes the wine product of the past three or four years. The demand presses the supply so hard that the wine manufacturers have been compelled to furnish their customers for recent years with Rhine wine to a great extent.

Mr. Longworth has a stock of two hundred thousand bottles catawba on hand. His ordinary sales annually are one hundred thousand bottles still, and the same quantity sparkling catawba.

T. H. Yeatman, Storrs township, west of Cincinnati, is one of our most successful raisers of the catawba grape, and manufacturers of the wine. For the past ten years, he has had eight acres under cultivation, and his crop rarely fails. He has received premiums on exhibition of his wines at the world's fair in London, in 1850; also at the world's fair in New York, and the United States fair at Philadelphia. Four premiums from the Cincinnati wine-growers' association and exhibitions, and at St. Louis, in 1858, where all the States were invited to compete, the highest premium of one hundred dollars, over one hundred rivals. On the 8th January last, he made sale of one hundred and thirty gallons of ca-

tawba, in casks, at two dollars and fifty cents per gallon, to a gentleman in New York, who had tasted wine of this brand in that city, and purchased this quantity for his own use.

It may indicate the progress of the wine business here to state that side hill lands on the Ohio river, below Cincinnati, too steep for cultivation otherwise, for which the proprietors had paid forty dollars per acre, have been sold within the last eight years, for grape culture, at one thousand dollars and twelve hundred dollars per acre.

Yeatman's sales average one thousand boxes yearly of first quality wine, which find a ready market as soon as ripened for use. His wine cellars are forty feet by eighty feet, and of the usual depth.

Robert Buchanan, in reply to a note I addressed him on the subject of the wine manufacture, states .

Since my last publication, 1851, the production of native wine has increased, with grape culture, to more than double the quantity then reported. In addition to the large cellars for preparing sparkling wine, at that time described, belonging to N. Longworth and to G. & P. Bogen, Mr. M. Werk has built one as large as his neighbors, and his wines are now quite celebrated.

In these three cellars there is, in ordinary years, an average stock of about four hundred thousand bottles of sparkling and still wines; but, owing to the great injury to the grape crop last year, the stock of wine is now below half that quantity. It is estimated that all other cellars in this city and vicinity, do not contain more than half as much as the three large cellars above named; and this may be assumed as a fair proportion for other years. The value of the stock of these wines, as prepared for market, at twelve dollars a dozen for the sparkling, and six to eight dollars for the still, may be set down in ordinary years at four hundred thousand dollars at least; and when it is known that fifteen to eighteen months are required to prepare and ripen the sparkling wine, this estimate may be considered a low one.

The demand for our native wines is generally ahead of the supply, and the prices paid by the vintners to the wine farmers has of late years been fifteen to twenty per cent. higher than in 1851. This may in part be accounted for, by the last three or four seasons being unfavorable to the production, but more perhaps to the fact,



that those who use wines find the native far more wholesome than the foreign wine. All our physicians concur in this opinion.

G. & P. Bogen. This firm has thirty-five acres in wine, principally in the vicinity of Carthage. Two acres are within the city limits. Of these, twenty-five acres are in bearing. Messrs. Bogen have made in favorable seasons as high as from five hundred to eight hundred gallons per acre. Grapes for wine are worth three dollars per bushel, and wine newly made, if of good quality, one dollar and twenty-five cents per gallon. Of course it is more profitable to bottle it off, as good catawba commands seven to eight dollars per dozen bottles—five bottles holding one gallon of wine. They make both still and sparkling catawba, and their wines enjoy a high reputation in this market. They also, to a limited extent, make catawba brandy, a first rate article.

One side of their wine cellar, which is one hundred and sixty feet in length by a breadth of thirty, and a depth of twenty feet, is filled with wine casks. These hold from three hundred to one thousand and fifty gallons each. No pains or expense has been spared to make their cellar in every respect what a wine cellar should be, the walls and arches being of great thickness.

They have recently set out to the extent of three thousand roots, a new variety of black grapes, termed the Virginia seedling, producing a fine red wine resembling Burgundy. This grape was introduced into Hermann, Mo., where it has been principally cultivated for several years, and is valued there on account of its reliability as a regular bearer. It is of vigorous growth, although not well adapted to propagation by cuttings, being best spread by layers; bears abundantly, is not subject to rot, and being a grape native to a region nearly of the same parallel of latitude with that of southern Ohio, is sufficiently hardy. They expect next year to increase the number of their vines by setting out yet more. This description of vines sells readily at wholesale for twenty-five cts. each, seven hundred and fifty dollars having been paid by this firm for the lot already set out. Sales rooms, at J. & J. M. Pfau, No. 258 Main street.

*Wire working.*—Five establishments, two only of much importance. Employ sixty hands, and a product of one hundred and fifty thousand dollars; raw material, 35 per cent.

Bromwell & Melish, 181 Walnut, between Fourth and Fifth streets, wove and worked iron manufactory. Ten thousand Japan-

ned fancy bird cages of every variety of pattern, are made here annually.

S. E. Burnet & Co., No. 27 Walnut street; wire workers. Employ twenty-one hands, value of manufacture, fifty thousand dollars. This last is of recent establishment, and has not gone fully into operation. The articles made here are substantially those made by Bromwell & Melish.

*Wood and Willow Ware.*—Fifteen factories, employ ninety hands, and manufacture a product of baskets, cradles, wagons, etc., to the value of fifty thousand dollars; raw material, 35 per cent.

*Wool Carding, etc.*—Three factories, principally small; ten hands.

*Writing Inks.*—Five factories, which manufacture one hundred thousand dollars annually, employing fifty hands; raw material, 50 per cent.

J. J. Butler, Excelsior Ink Works, enjoys a high reputation in the manufacture of writing and copying inks, which entirely supersede the eastern and European articles of the sort. This is becoming an important establishment, and already employs twenty-five hands, and makes a product of fifty thousand dollars.

*Wrought Nails.*—Four shops, twelve hands, twelve thousand dollars labor product.

## SYNOPSIS OF MANUFACTURING AND INDUSTRIAL PRODUCTS.

| NATURE OF PRODUCTS.                       | VALUE.  |         |          |
|-------------------------------------------|---------|---------|----------|
|                                           | 1841.   | 1851.   | 1859.    |
| Agricultural machines and implements..... | 36000   | 78000   | 1290000  |
| Alcohol and spirits wine.....             | 145000  | 608260  | 2260000  |
| Ale and beer.....                         | 126000  | 566000  | 1500000  |
| Animal charcoal.....                      | 5000    | 25000   | 30000    |
| Artificial flowers.....                   | 3000    | 14200   | 24000    |
| Awnings, sails, tents, bags, etc.....     | 12000   | 45000   | 52000    |
| Bagging factories.....                    | 78650   | 270000  | .....    |
| Bakeries.....                             | 259000  | 637662  | 960280   |
| Baking Powders.....                       | 6000    | 18000   | 84000    |
| Band and hat boxes.....                   | 9000    | 36000   | 42000    |
| Bells and brass work.....                 | 11000   | 209500  | 425000   |
| Bellows.....                              | 82600   | 18000   | 20000    |
| Belting, hose, etc.....                   | 21000   | 96000   | 96702    |
| Billiard tables.....                      | .....   | .....   | 342000   |
| Blacking, paste.....                      | 11000   | 24000   | 36000    |
| Blacksmithing.....                        | 211400  | 285495  | 483000   |
| Blinds, Venetian.....                     | 12000   | 40000   | 60000    |
| Blocks, spars and pumps.....              | 26172   | 21000   | 25400    |
| Boilers, steam engine.....                | 106000  | 349000  | 463000   |
| Bolts, nuts, etc.....                     | 6000    | 20000   | 65000    |
| Bonnet bleaching and pressing.....        | 10000   | 22000   | 28000    |
| Book binding.....                         | 107700  | 162000  | 326000   |
| Boots and shoes.....                      | 488000  | 1182650 | 1750450  |
| Boxes, packing, etc.....                  | 39000   | 120000  | 210000   |
| Brands, stamps, etc.....                  | 640     | 13500   | 22000    |
| Bricks.....                               | 87500   | 207000  | 485000   |
| Bricklaying and plastering.....           | 208650  | 408650  | 640700   |
| Bristles and curled hair.....             | 16600   | 48800   | 140000   |
| Britannia ware.....                       | 12840   | 38960   | 100000   |
| Brooms.....                               | 3000    | 15000   | 30000    |
| Brushes.....                              | 19000   | 60500   | 125000   |
| Buckets and tubs.....                     | 21650   | 84200   | 60000    |
| Bungs and plugs.....                      | 5000    | 12000   | 10000    |
| Burning fluid.....                        | 89000   | 110000  | 195000   |
| Burr mill stones.....                     | 10500   | 24000   | 100000   |
| Butchers.....                             | 1098015 | 2850000 | 4370000  |
| Candies and confectioneries.....          | 54000   | 128120  | 262000   |
| Candles, lard oil, etc.....               | 353940  | 4490900 | 6114500  |
| Cap and hat bodies.....                   | 10000   | 39000   | 140000   |
| Carpenters and building work.....         | 418600  | 2116000 | 2760000  |
| Carpet weavers.....                       | 46000   | 56000   | 75000    |
| Carriages, omnibuses.....                 | 127000  | 355847  | 460000   |
| Carving.....                              | 2000    | 7000    | 30000    |
| Charcoal, pulverised.....                 | 6000    | 18500   | 30000    |
| Chemicals.....                            | 187000  | 361000  | 450000   |
| Cisterns.....                             | 21300   | 75000   | 75000    |
| Cloaks, mantillas, etc.....               | 3000    | 28000   | 450000   |
| Clothing, made up.....                    | 1223800 | 1947500 | 15000000 |

| NATURE AND VALUE OF PRODUCTS.                  | 1841.  | 1851.   | 1859.   |
|------------------------------------------------|--------|---------|---------|
| Coffee, roasted or ground.....                 | 8000   | 38000   | 225000  |
| Combs .....                                    | 18550  | 18000   | .....   |
| Cooper ware.....                               | 167000 | 387000  | 1510000 |
| Copper, iron and sheet iron ware.....          | 211300 | 258000  | 610000  |
| Copper and steel plate engraving.....          | 42000  | 50000   | 48000   |
| Cordage, hemp and manilla.....                 | 33600  | 180000  | 234000  |
| Cotton yarns, sheetings, etc.....              | 195600 | 661000  | 680000  |
| Cured beef and tongues.....                    | 21000  | 135000  | 225500  |
| Cutlery, surgical, dental, etc.....            | 10700  | 40000   | 80000   |
| Dental furniture.....                          | .....  | .....   | 10000   |
| Dentistry.....                                 | 6000   | 92000   | 125000  |
| Die sinking .....                              | 1500   | 5000    | 7500    |
| Drugs, marble, etc., ground.....               | 10000  | 50000   | 60000   |
| Dyeing and scouring.....                       | 15540  | 28000   | 60000   |
| Edge tools.....                                | 41600  | 117900  | 158000  |
| Engraving, seal, card, etc.....                | 5000   | 18000   | 30000   |
| Engraving, wood.....                           | 22550  | 51000   | 75000   |
| Feed and flour.....                            | 816700 | 1690000 | 3216000 |
| Fire engines and hydraulics.....               | 13750  | 65000   | 150000  |
| Florists and nurserymen.....                   | 15000  | 120000  | 300000  |
| Files.....                                     | 1500   | 7000    | 18000   |
| Foundry castings.....                          | 668657 | 3676500 | 6353400 |
| Fringes.....                                   | 15400  | 20000   | 66000   |
| Furniture.....                                 | 676800 | 1660000 | 3656000 |
| Gas and coke.....                              | .....  | 65000   | 160000  |
| Gas fitting.....                               | .....  | 45000   | 110000  |
| Gas generators, portable.....                  | .....  | .....   | 50000   |
| Gilders .....                                  | 7000   | 39000   | 60000   |
| Gilders on glass.....                          | .....  | .....   | 10000   |
| Glass ware.....                                | 10000  | 40000   | 100000  |
| Gloves.....                                    | 5000   | 20000   | 30000   |
| Glue .....                                     | 6000   | 28000   | 66000   |
| Gold leaf and dentist's foil.....              | 4000   | 11000   | 15000   |
| Gold pens.....                                 | .....  | 3500    | 6500    |
| Grease.....                                    | 56000  | 90000   | 130000  |
| Gunsmithing .....                              | 16842  | 35000   | 45000   |
| Hats .....                                     | 312000 | 445000  | 25000   |
| Hat blocks.....                                | 2000   | 4500    | 4000    |
| Horse shoes .....                              | 10000  | 48000   | 50000   |
| Hot air furnaces.....                          | 3000   | 60000   | 100000  |
| Ice .....                                      | 20000  | 150000  | 250000  |
| Iron, bar, boiler, sheet, etc., and nails..... | 394000 | 1146000 | 4334000 |
| Iron, wrought, tubular bridges.....            | .....  | .....   | 1000000 |
| Japanned tin ware and tinner's tools.....      | 3000   | 58000   | 134000  |
| Ladders.....                                   | .....  | 5000    | 20000   |
| Lead, sheet and pipe.....                      | .....  | 5000    | 61000   |
| Lever locks.....                               | 39000  | 53000   | 75000   |
| Lightning rods.....                            | .....  | 150000  | 175000  |
| Liquors, domestic .....                        | 145000 | 726000  | 3600000 |
| Lithography.....                               | 3500   | 20000   | 165000  |
| Machinists .....                               | 77000  | 130000  | 450000  |
| Machinery, wood working.....                   | .....  | 130000  | 175000  |
| Malt.....                                      | 89250  | 396200  | 589500  |
| Marble working.....                            | 10000  | 190000  | 325000  |
| Masonic and Odd Fellows' regalia.....          | .....  | 21000   | 25000   |
| Mats.....                                      | .....  | 7240    | 9000    |



| NATURE AND VALUE OF PRODUCTS.                 | 1841.   | 1851.   | 1859.   |
|-----------------------------------------------|---------|---------|---------|
| Mathematical, etc., instruments.....          | 30000   | 40000   | 40000   |
| Mattresses.....                               | 70000   | 95000   | 120000  |
| Medicines, patent.....                        | 68000   | 952000  | 1960000 |
| Millinery.....                                | 120000  | 820000  | 1750000 |
| Mineral waters.....                           | 20000   | 165000  | 256000  |
| Morocco leather.....                          | 15000   | 67000   | 167000  |
| Mouldings.....                                | .....   | .....   | 30000   |
| Musical instruments.....                      | 25000   | 89500   | 49000   |
| Music publications.....                       | 6000    | 50000   | 200000  |
| Oil cloths and window shades.....             | 73000   | 50000   | 56000   |
| Oil, castor.....                              | .....   | 60000   | 30000   |
| Oil, coal.....                                | .....   | .....   | 660000  |
| Oil, cotton seed.....                         | .....   | .....   | 100000  |
| Oil, Linseed.....                             | 36000   | 263000  | 350000  |
| Paints.....                                   | 121750  | 385000  | 418000  |
| Painting and glazing.....                     | 78000   | 385000  | 456000  |
| Paper.....                                    | 65000   | 320000  | 616000  |
| Pattern making.....                           | 3500    | 25500   | 27000   |
| Perfumery.....                                | 10000   | 120000  | 190000  |
| Photographs, daguerreotypes, etc.....         | 950     | 80000   | 150000  |
| Pickles, preserves, etc.....                  | 5000    | 30000   | 35000   |
| Planed boards, flooring, etc.....             | 73000   | 351200  | 565000  |
| Planes, etc.....                              | 95000   | 167000  | 30000   |
| Plating machines.....                         | .....   | 30000   | 80000   |
| Platform scales.....                          | .....   | 60000   | 84000   |
| Plating, silver.....                          | .....   | 10000   | 35000   |
| Plumbing.....                                 | 48000   | 195000  | 406000  |
| Pocket books.....                             | .....   | .....   | 40000   |
| Pottery.....                                  | 12000   | 36000   | 90000   |
| Pork and beef packing.....                    | 3074912 | 5760000 | 6300000 |
| Printing ink.....                             | .....   | 15000   | 20000   |
| Publications, book, newspaper, etc.....       | 518500  | 1276540 | 2610050 |
| Pumps, force, lift, etc.....                  | 13750   | 65000   | 75000   |
| Railway chairs, etc.....                      | .....   | .....   | 360000  |
| Ranges, cooking.....                          | .....   | 25000   | 75000   |
| Refrigerators.....                            | 9000    | 25000   | 75000   |
| Roofing, tin, composition, metallic, etc..... | .....   | 76000   | 366000  |
| Saddle bags, physicians.....                  | .....   | .....   | 5000    |
| Saddle trees.....                             | .....   | 4500    | 5000    |
| Saddlery, harness, etc.....                   | 231000  | 306500  | 663000  |
| Safes, vaults, etc.....                       | 11400   | 96000   | 408000  |
| Sash, blinds and doors.....                   | 71700   | 312000  | 1380000 |
| Sausages.....                                 | 21000   | 162000  | 215000  |
| Saws.....                                     | .....   | 16700   | 95000   |
| Saw mills.....                                | 73000   | 411000  | 820000  |
| Screw plates.....                             | 2500    | 16500   | 21000   |
| Shirts.....                                   | 40000   | 157000  | 575000  |
| Show cases.....                               | .....   | .....   | 6000    |
| Silver ware.....                              | 56500   | 90000   | 110000  |
| Spokes, felloes and hubs.....                 | 10000   | 70500   | 125000  |
| Stained glass.....                            | .....   | 15000   | 9000    |
| Starch.....                                   | 45000   | 98000   | 230000  |
| Steamboats.....                               | 592500  | 488000  | 400000  |
| Stockings.....                                | 12000   | 13000   | 18000   |
| Stone cutting.....                            | 83000   | 222000  | 1125000 |
| Stone masons.....                             | 101000  | 308000  | 775000  |

| NATURE AND VALUE OF PRODUCTS.                 | 1841.    | 1851.    | 1859.     |
|-----------------------------------------------|----------|----------|-----------|
| Sugar refineries .....                        | .....    | .....    | 750000    |
| Stucco work.....                              | 6000     | 12000    | 18000     |
| Tapers.....                                   | .....    | .....    | 65000     |
| Tailoring.....                                | 276000   | 832000   | 2035000   |
| Tanneries.....                                | 335000   | 965000   | 1520000   |
| Terra cotta ware.....                         | .....    | .....    | 25000     |
| Tobacco, snuff and cigars.....                | 325000   | 931000   | 1667000   |
| Trunks.....                                   | 226700   | 506000   | 650000    |
| Trusses.....                                  | .....    | 10000    | 56000     |
| Turnery.....                                  | 28275    | 152000   | 95000     |
| Types, stereotypes and printing materials.... | 45400    | 146000   | 310000    |
| Undertakers.....                              | 15500    | 76000    | 140000    |
| Upholsterers and undertakers.....             | 84800    | 95000    | 160000    |
| Varnish, copal.....                           | 15000    | 135000   | 200000    |
| Veneers.....                                  | .....    | 66000    | 100000    |
| Vinegar.....                                  | 30500    | 168750   | 250000    |
| Wagons, carts, etc.....                       | 104300   | 132000   | 210000    |
| Wall paper, staining and hanging.....         | 34400    | 30000    | 18000     |
| Wash boards, zinc.....                        | .....    | 85000    | 210000    |
| Wigs.....                                     | 6000     | 7500     | 10000     |
| Wine, catawba, etc.....                       | .....    | 150000   | 500000    |
| Wire workers.....                             | 13000    | 69000    | 150000    |
| Wool carding.....                             | 3000     | 10000    | 12000     |
| Writing inks.....                             | 5000     | 15000    | 100000    |
| Wrought nails.....                            | .....    | 9000     | 9000      |
| Whisky.....                                   | 145000   | 2857920  | 5318730   |
| Wood and willow ware..                        | 2800     | 18000    | 50000     |
| Miscellaneous .....                           | 63300    | 385740   | 656189    |
|                                               | 17780033 | 54550134 | 112254400 |

This synopsis affords an opportunity to trace our industrial progress from 1841 to this date.

Of the \$112,254,400 in value of these products for 1859, \$58,000,000 is embraced in raw materials, and \$54,254,400 constitutes the value of labor, interest on capital invested, etc. It thus appears that the average of raw materials is but 54 per cent. of the entire product, leaving the residue as the reward of enterprise and industry.

## XIV. COMMERCE.

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Our commercial year closes on the 31st August, which date makes it impossible to exhibit a table of the imports and exports of 1858-9, and renders those of 1857-8, the latest that could be made use of as an illustration of the progress of Cincinnati in this business department.

In 1841-2, the value of imports to this place was \$41,236,199; of exports, \$33,234,898. These figures advanced year by year, steadily, until 1857-8, when the value of imports reached \$74,348,758, and of the exports, \$47,497,095; both of these amounts being a fall off from the previous year—the imports of nearly three millions, and the exports of more than eight millions of dollars. This was occasioned in part by the fall of produce incident to the fiscal embarrassments in the eastern cities and Europe, but principally by the failure of crops for two years, which, by depriving our western customers of the means of meeting their engagements here with punctuality, checked the current of importations to this point, and to a still greater extent lessened the flow of produce to the great markets at the east. But for these circumstances, our imports and exports would have greatly exceeded all previous years. As far as the register of 1858-9 extends, the means of forming any correct judgment on the subject, the imports of the current year will reach eighty-five millions, and the exports ninety millions.

It is well known that Cincinnati suffered less by the monetary crisis of 1857 than any city of importance in the whole country, only one wholesale and a few retail houses having succumbed to the pressure of the times. This great fact speaks volumes as to the substantial and solvent character of our business.

Cincinnati has always been a great business centre to the west, especially, and when the communication shall be thoroughly opened to the distant south, by the completion of the unfinished railways to Knoxville and Nashville, a greatly extended business, both commercial and manufacturing, will be the immediate result.

## TRADE WITH THE COUNTRY.

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WITHIN the last eight or ten years Cincinnati has been gaining a position as a great centre of supply, by wholesale, to the country merchants of Ohio, Indiana, Illinois, and Kentucky, of their dry goods, groceries, hardware, boots and shoes, hats, drugs, and fancy goods. In these various lines of business, it is becoming very apparent to purchasers that they can deal here to greater advantage than in our eastern cities. The effect of this has been to enlarge our sales to country merchants. For example—dry goods, from \$4,000,000, in 1840, to \$10,000,000, in 1850, and to \$25,000,000 at this time. There is a corresponding increase, also, in all other descriptions of business which go to make up general sales to country merchants.

In the infancy of this species of trade, from twenty to twenty-four houses transacted all that was to be done in this line. Now there are not less than fifty wholesale dry goods houses, and nearly as many wholesale clothing establishments, which last also sell dry goods extensively. The amount of goods, of all kinds, sold here to the country trade, cannot be less than seventy-five millions of dollars value, in which I do not include articles of Cincinnati manufacture, which would increase those figures to one hundred millions of dollars.

### DRY GOODS.

No one can have passed, or, rather, have attempted to pass, through Pearl and its Walnut street vicinity, within the last year or two, without being forcibly struck with the conviction that we are rapidly becoming independent of the wholesale business of the Atlantic cities, and rendering the country merchants of Indiana, Ohio, and Kentucky the same. The boxes and bales, occupying almost the whole side-walks, and piled one upon another to the highest possible point of safety, besides the extent to which they occupy the inside of the stores, attest the progress of our whole-



sale dry goods business, and which its present bounds, spacious as we consider them, will soon fail to accommodate.

If it be asked by our friends at the east, how it can be possible that we can compete with the jobbing houses in New York, Philadelphia, and Baltimore; it may be replied, that our large houses can always fill a bill at as low rates, adding carriage, as their eastern rivals, being supplied from the same sources, and having representatives constantly in the Atlantic cities, while they offer facilities and conveniences to purchasers which are not accessible at the east.

1. The merchant who goes east is compelled, in order advantageously to make up his full assortment, to visit Boston, New York, Philadelphia, and Baltimore. This is attended with traveling and hotel expenses, as well as loss of time at home of still greater value, which puts at least five per cent. on his season's purchases.

2. By purchasing in Cincinnati, at a distance so short and a point of such easy access from home, the western merchant is enabled to buy in three or four days what will require as many weeks in a trip east. This is not merely a saving of time, but a means of choosing the period of absence, not allowable in long and distant journeys. Almost any man can arrange and provide for an absence from home of a few days, but every merchant's business is sure to suffer in the absence of as many weeks.

3. He can obviate the risk of accumulating unsaleable goods; keeping his supplies within the limits of his sales by making smaller and more frequent purchases.

4. In making bills oftener, he has a greater average of credit, as well as greater convenience in the division of payments.

Stocks of goods in Cincinnati are equal in quality and assortment to any in the Atlantic cities. Here have been concentrated at one point, for purchase, articles which to lay in to equal advantage elsewhere, would require a visit to not less than four of our eastern cities. The bonnets, domestic cloths, sheetings, shirtings and prints of *Boston*; the French, German, Italian and Chinese silk and fancy dry goods and foreign cloths of *New York*; the domestic checks, gingham, prints and handkerchiefs, pantaloony and umbrellas of *Philadelphia*; and the sheetings and shirtings, drillings, tickings and heavy domestics of *Baltimore*, may be found here in a single store. The beauty, style and variety of the goods

for sale here have been unequalled hitherto, and the prices low, having been laid in generally during the recent depression of prices in the eastern markets.

Now that accumulation at the west of capital enables our dry goods houses to compete at all with their rivals at the east, a position has been assumed by our merchants that will never be lost, for without referring to the fact that business expenses here are greatly less than in our Atlantic cities, it may be noticed that, to a great extent, the very reasons why it is the interest of western traders to deal with our merchants, are those why our merchants will always be able to sell as low, or, if necessary, lower than their Atlantic competitors. What this business intercourse has done and is doing for the interests of the sellers here, may be judged by the magnificent business structures rivaling anything of the kind in the great cities of our eastern States, which have been put up during the last few years on our business streets—Pearl street especially.

On the whole we have made for our city one more advance to that future of business operations which is our final destiny—as the great central metropolis of the United States.

What has been said here of the dry goods country trade, applies in a corresponding degree to the grocery, hardware, crockery, boots and shoe, fancy goods, and other departments of business.

Many of our principal houses in the country trade and commission business have cards of addresses at the close of this volume. These serve to show the variety and extent of business here. Some of the more extensive of these make sales to the extent of from five hundred thousand to one million dollars yearly, and the aggregate of goods sold by wholesale is equal to seventy millions dollars annually. The sales of wool by one house here reaches to seven hundred and fifty thousand dollars yearly.

## XV. PUBLIC INSTITUTIONS.

## CINCINNATI WATER WORKS.

Two combination high pressure engines, cylinders 22 inches by 10 feet stroke ; pumps, 14 inches by 10 feet stroke. Three boilers, tubular, 52 inches by 16 feet long. Actual horse power exerted, 151.56.

Height to which water is elevated, 176 feet  $\frac{1}{2}$  inch ; height from base of pumps to top of discharge pipe 162 feet 9 inches. Height from low water mark to base of pump, 13 feet  $3\frac{1}{2}$  inches. Capacity of pumps per revolution, 2 strokes, 306 U. S. gallons. Capacity of pumps per one hour, 197896 U. S. gallons.

Two condensing engines. Cylinders of each, 45 inches by 8 feet stroke ; pumps, 18 1-8 and 18 3-16 inches by 8 feet stroke.

Three boilers, 4 flues each, 72 inches by 30 feet long. Actual horse power exerted, 118.25. Height to which water is elevated, 176 feet  $\frac{1}{2}$  inch. Height from base of pump to top of discharge pipe, 160 feet 9 inches. Height from low water mark to base of pump, 15 feet  $3\frac{1}{2}$  inches. Capacity of pumps per revolution, two strokes, 208 U. S. gallons. Capacity of pumps per one hour, 169,201 U. S. gallons.

Average consumption of water in spring, summer and part of fall seasons of 1858, 5,100,649 U. S. gallons. Capacity of reservoir at 21 feet 6 inches depth, 5,981,518 gallons.

Consumption of coal in 1858, 114,600 bushels. Cost of coal in 1858, \$11,460.

20 inch pipe, 18,340 feet ; 10 inch, 29,790 ; 8 inch, 11,850 ; 3, 4 and 5, 333,497 ; total amount of pipe laid, 393,477 feet.

The amount of pipe laid in 1858—20 inch, 1,250 feet ; 10 inch, 8,190 ; 4 inch, 23,168 ; total in 1858, 32,608 feet ; making over  $74\frac{1}{2}$  miles laid, up to this time.

Whole number of hydrants, 10,679 ; number of hydrants out of use, 967 ; in use January 1, 1859, 9,812.

## THE CEMETERY OF SPRING GROVE.

This "Necropolis," city of the dead, is situated in the beautiful valley of Mill creek, four miles north of Cincinnati, near what was known, in the pioneer era of this country, as Ludlow's Station. It contains 280 acres, 267 being north of the Cincinnati, Hamilton and Dayton Railroad, and inclosed with a hedge of osage orange, and platted and laid off into sections and lots, for the purposes of sepulture; and thirteen acres south of the railroad, and bounded by Mill creek, which are used for the convenience of the workmen employed about the premises.

The cemetery is laid out in the landscape style, and the principal avenues, which are of the liberal width of twenty feet, made to conform to the undulating and picturesque features of the grounds. A more beautiful spot for the purpose could scarcely have been selected.

From a recent report of the trustees, the grounds and improvements, up to the first of December last, had cost \$227,580, and the improvements by individuals on their own lots, amounted to about as much more. Over twelve miles of avenues had been opened and graded. The number of lot owners is two thousand four hundred and sixty-six.

Officers—R. Buchanan, president; Cyrus Davenport, secretary; D. H. Horne, treasurer.

Directors—R. Buchanan, J. P. Foote, W. B. Smith, A. H. Ernst, S. C. Parkhurst, G. K. Shoenberger, D. H. Horne, Peter Neff, and William Resor.

Henry Earnshaw, superintendent; Adolphus Strauch, landscape gardener.

Office, Melodeon Building, corner of Walnut and Fourth streets.

This cemetery has now become one of the most attractive objects to strangers visiting Cincinnati. More than fifty-two hundred persons on foot, thirty-two hundred carriages, and seventy-three hundred buggies passed through the entrance gate of these grounds during the past year. Among the latest improvements is an artificial lake of six acres in extent, fed by springs at the north with a descent of 1.10 feet, which will afford a splendid *jet d'eau*, soon to be constructed. A pair of English swans, presented by George Selves, give animation and add beauty to the surface of the lake.



## PUBLIC BUILDINGS.

Within the last eight or ten years, a marked improvement in the style of our public buildings has become manifest, and there is now no city in the west that can exhibit so many of a first class in beauty, magnitude and convenience.

Of those longest erected, are St. Peter's Roman Catholic Cathedral, the First and Seventh Presbyterian, St. John's—Episcopal—churches, House of Refuge, Hughes and Woodward High Schools. Of the latest built, are the National Theatre, Pike's Opera House—this last being, by the testimony of one of our citizens who has traveled extensively for many years, the finest public building put up out of private resources in the whole world—the Central Presbyterian church and the Masonic temple. Among these might be ranked Carlisle's building and Shillito's store, which, although occupied as stores and offices merely, have hardly any rivals in their line in any of the eastern cities.

The United States public edifices—the custom house and post office building, and the marine hospital, are also admirable buildings, not only as respects their exteriors, but for the inside construction and arrangements. Two of these various edifices referred to are illustrated in this volume by engravings, which it may be well to accompany by a detailed description.

The Hughes High School. No cost of labor has been spared to render this building a perfect adaptation of means to ends. The style and order are collegiate Gothic.

It has been built facing Mound street, whose southern termination is immediately opposite, and occupies a space sixty-six by ninety feet upon the ground, and seventy-seven feet to the square, and eighty-five feet to the comb of the roof, in height—a parallelogram in shape, flanked at the corners by octagon towers, which give a spirited and novel effect.

The first and second floors are arranged for eight recitation rooms, each thirty-three feet square, and fifteen feet high. The third story will constitute a lecture and exhibition room, entire, as needed for either purpose. It is twenty feet in height, and finished in the handsomest style. A hall, sixty-six by thirty-three feet for philosophical experiments and scientific illustrations, forms one half of the basement. The other half will be the depository of

wood, coal, etc. Each floor of the towers already alluded to, will afford committee rooms for the trustees, or withdrawing rooms for teachers or lecturers, as the case may be.

The outer walls above the basement are twenty inches thick, the partitions sixteen inches. The buttresses around the building are in thickness four feet. The joists are all trussed with oak, and the floors are of yellow pine, laid double, so that as little sound as possible shall be created by walking through the halls. Every opening to the building is arched, the outer doors being three inches thick. There is one main entrance in front and one at each side, and the passages and stairs being broad and direct, afford every facility for escape in case of fire. The roof being metallic, adds security in this respect, as regards exposure to fire from buildings adjacent.

The inside woodwork is stained pine, which finishes beautifully, and the inner doors all have mortise locks. The school rooms are warmed by hot air, and thoroughly ventilated by modern apparatus for that purpose.

That no proper expense has been spared in this edifice may be inferred from the fact that the stairs alone cost five hundred dollars. The lot on which it stands cost eighteen thousand dollars, and the school house twenty-two thousand dollars more. There is no building in Cincinnati of equal extent, solidity, capacity and finish, which has cost as little. In this amount is included all the out door work, paving, front fence, and finishing the grounds.

The elevation and exposure of this edifice are such as to secure during the most intense heats of summer a constant current of air from outside. These are almost always from the southwest, following the course of the river, and its adjacent low grounds, as a funnel. The prospect, south and west, from the upper rooms of the school house, is of unrivaled range and beauty.

The building on the left hand side, at the edge of the school house, is the fine family mansion of one of our old citizens, Henry Brachmann.

The Masonic Temple. The new Masonic temple now in progress of erection on the northeast corner of Third and Walnut streets, when finished will be one of the finest specimens of architecture of its kind in the Union. It was commenced in the spring of 1858, and if the work is not delayed, it will be completed within two years from the present time. So much has been constructed

upon its Third street front, as will give an idea of the general design and final appearance of this splendid structure, and the engraving of it in this volume will render that appearance more distinct and complete.

It fronts 195 feet on Third street by 100 feet on Walnut; the two fronts composed entirely of freestone. The height will be four stories, the first fifteen feet in the clear, the second fourteen feet, the third eighteen, and the fourth twenty-two feet. Entire height of the edifice, eighty-five feet; of the spire of the main tower, 180 feet; of the other two, 140 feet. The style of the architecture is Byzantine.

The two lower stories will be devoted to business purposes, and rented out as bankers', brokers' and other offices, while the fraternity will occupy the third and fourth for masonic purposes.

In the third story will be a chapter room 28 by 49 feet; a royal select council room 21 by 42 feet; a library 20 by 28 feet; a banquet hall 21 by 58 feet; a knights templars' encampment asylum 28 by 38 feet 4 inches; a knights templars' royal arch council room, 24 feet 4 inches by 28 feet 8 inches; a Persian court, 18 feet by 42 feet 9 inches; the stair case occupying a space of 20 by 28 feet, and thirteen smaller rooms, to be used as parlors, janitor's rooms, bed rooms, etc.

In the fourth story there will be a Grand Lodge room, 42 feet 9 inches by 70 feet; an entered apprentice's lodge room, 28 by 60 feet; a fellowcraft's lodge room, 28 by 56 feet; a master mason's lodge room, 28 by 56 feet, and nine ante-rooms, three bed rooms, wash rooms, water closets, etc. All the principal rooms will be provided with regalia closets.

The roof will be of tin, a high pitched mansard roof ornamented with dormer windows.

The main entrance will be through a grand archway on the Third street front.

The temple is estimated to cost one hundred and fifty thousand dollars. Hamilton & McLaughlin, architects.

Among the more recent erections in Cincinnati, are the post-office and custom house, at the corner of Fourth and Vine streets, and the marine hospital, at the corner of Lock and Sixth streets, both constructed at the expense of the United States government.

The marine hospital has just been finished. It is a handsome, though not elaborately ornamented edifice, 100 feet square, of

Italian façade, with verandahs on front and sides, erected upon a two acre lot, and constructed principally of stone, brick and iron, and is the most thoroughly fire-proof building in the State. It is warmed and ventilated and supplied with all the modern improvements for the health and comfort of the inmates. Every floor in the building is arched, the arches springing from wrought iron beams, resting upon the walls.

It will accommodate 250 patients.

Thomas M. Bodley, constructing superintendent.

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### CINCINNATI GAS LIGHT AND COKE COMPANY.

CAPITAL, \$1,000,000.

Incorporated by special act of the Legislature of Ohio, April 3, 1837, and chartered by ordinance of the city council of Cincinnati, June 16, 1841.

President, James H. Caldwell ; President, *pro tem.*, Henry J. Miller.

Directors—James H. Caldwell, Henry J. Miller, Wm. S. Caldwell, Reuben R. Springer, James H. Caldwell, Jr.

Secretary, William L. Clarke. Foreman of works, John Westwood. Clerk of works, S. S. Stratton. Inspector of Meters and fitting department, Alfred Hopper. Inspector of street lamps, Thos. L. Gaussen. Engineer and Superintendent, John Jeffrey.

Office, No. 269 Vine street. Gas works, Front street, between Rose and Mill streets.

The Cincinnati gas works were originally put into operation on January 14, 1843, under the auspices of James F. Conover and James H. Caldwell, since which time the works have grown with the growth of the city, and become an extensive institution, with a large number of stockholders. The gas works now in operation and in progress of construction, will be capable of producing and supplying 1,500,000 cubic feet of gas per diem. The main pipes laid in the streets measure 55 miles, of diameters varying from 16 inches to 2 inches. The number of consumers is 1,659, and the number of public street lamps is 1,657. The company's pay roll shows an average of 250 men constantly employed in the manufacture and distribution of gas, in addition to the large contracts for castings, buildings, pipe laying, coal, etc., etc.; thus giving cir



cultation annually to a large sum of money, and employment to support a considerable population. The company pays an annual tax upward of \$11,000, and the land occupied by the gas works is over three and one half acres.

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### FIRE DEPARTMENT.

Cincinnati, like her sister cities at the east, originally employed volunteer companies for the extinguishment of fires, and for several years here, as well as there, the noble emulation of these associations in efforts to preserve property and life, developed many daring and heroic deeds. But as the older members became less fit for active service, by the lapse of years and demands in other employments for their time and labors, the institution had, as elsewhere, gradually and silently fell into the hands of boys, comparatively, and the same scenes of strife, disorder and dissipation marked our fire department which have disgraced Baltimore, Philadelphia and other eastern cities. Fire riots, as they have been called, attended many instances in which the different engines were called into service, and in several cases violence and even murder were the result.

It was also discovered, in the progress of this state of things, that the numbers and *esprit de corps* of the fire department, made the members an element capable of being moulded by politicians to their own ends for election purposes. The engine houses became places of resort of evenings and on the Sabbath, not only of a large share of the members, but of their acquaintances, and every species of immorality was the consequence. Orderly citizens who deplored this state of things could perceive no remedy for it, while they feared it would become worse and worse in the future.

A few individuals, prominent among whom were James H. Walker, at the time a trustee to the city council from the fifth ward, did not, however, despair of effecting a reform, although they were fully aware of the obloquy, pecuniary loss and personal danger which had to be incurred in the effort. Just at this juncture, the invention of the steam fire engine brought the question of reform to an issue, by affording a starting point to it.

Mr. Walker and his associates in council advocated the intro

duction of these engines, and the adoption of the pay system for firemen, which was its natural result. Violent was the opposition in and out of doors. All the baser passions of those interested in perpetuating the existing evils, were aroused. Incendiary and anonymous letters were received by those actively engaged in the reform, especially by Mr. Walker, uttering atrocious threats in case the proposed measures were carried into effect. The movement itself was feebly supported or even discountenanced by those who at first seemed disposed to co-operate, but who were now intimidated by the violence of their opponents. But, nothing daunted or discouraged by these difficulties, the advocates of reform met, and having agreed upon the details of the new system, and having drawn up an ordinance in conformity to the proposed measure, they resolved to put it through without alteration or amendment, at the ensuing meeting of the council. It was accordingly introduced, when every artifice was resorted to for the purpose of delaying, if not defeating, the ordinance, which after a stormy and obstinate debate, was put to the vote, carried, and without unnecessary delay put into operation.

The next difficulty to be met was to obtain the services of a chief engineer to the new organization, so as to carry it successfully into effect. Miles Greenwood, on being applied to, consented to serve in that capacity until the contemplated change should be fully carried out, and all resistance to the reform should cease, devoting his well known energies to the cause, and not only paid out of his own means an assistant engineer, but generously assigned his salary for his entire term of office, as principal, to the treasury of the Ohio Mechanics' Institute.

Patience, perseverance and firmness finally carried the whole system to an entire success, and the last and perhaps the greatest difficulty, that of adjusting the pecuniary interests of the city and of the respective companies, in the buildings and apparatus of the department, which had been suffered to become greatly complicated, was triumphantly overcome. Mr. Walker personally effected a settlement between the city and each company of their respective interests, which in the main and finally proved satisfactory to both parties, and the whole community has now settled down into full acquiescence with and support of the new organization.

It does not comport with the space that can be given in these pages, to enter into the harassing and vexatious details of this sub-

ject, but the nature and degree of the difficulties, and the arduous labor of removing them may be inferred from the fact that to this day, at Baltimore, Philadelphia, and other places, where a kindred reform has been agitated for a length of years, the pressure in and outside the public authorities has hitherto successfully resisted the desired change. Nothing short of the determination and perseverance of James H. Walker could have here carried it through, and the city of Cincinnati owes him a debt for moral and pecuniary benefits which we never can adequately pay or liquidate.

Among the many mechanical and scientific trophies of Cincinnati, may be fairly reckoned the invention of the steam fire engine, made in this city by Abel Shawk, a well known and ingenious mechanic here. After devoting years of labor in carrying out this apparatus to its present degree of perfection and efficiency, under discouragements which would have led any ordinary man to its abandonment, he has brought the steam fire engine to the perfection it now exhibits.

I regret to add, that his generous and unsuspecting nature has been so far abused as to deprive him to a great extent of the just pecuniary recompense thus earned; but those who know him best, feel that to him, and him only, belongs the credit of having first and fully brought this important invention into practical service.

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#### THE PROTESTANT UNIVERSITY OF THE UNITED STATES.

This institution was incorporated by the Legislature of Ohio, in the year 1845, and is under the management of a competent board of trustees. The following is the second section of its charter, which fixes its location, defines its object, and secures to it the most unlimited academic powers, viz: "The said university shall be located *in, or near to,* the city of Cincinnati; and its object and purpose are hereby declared to be the promotion and advancement of education, the cultivation and diffusion of literature, science, and the arts, in all their departments and faculties." It is not *Sec-tarian*. Thus, in the ninth and eleventh sections, it is expressly "provided that in the rules and regulations governing the admission of students, there shall be no preference on account of religious sects, or any other cause, except good moral character, and the promise of superior scholarship," and "that the corporation

shall have no power at any time to establish a sectarian religious test, as a condition of enjoying the honors and privileges of the university." But it is *Protestant*. And this name was given to it, by the Legislature, because of the provision in the eleventh section of its charter, "that it shall always be conducted in subserviency to the true, reformed, protestant Christian religion, as taught in the Holy Scriptures of the Old and New Testaments." Its general corporate powers are correspondingly liberal in their character. This outline, as it is due to our citizens, will sufficiently explain, for the present, the nature and scope of the institution.

The university has not yet been opened for instruction, but much has been done in preparation for this. The Rev. William Wilson, D.D., L.L.D., is its chancellor. It has recently been endowed, by the munificent bequest of an enlightened, spirited and patriotic protestant of the city of New York. The whole protestant world, as well as the republic of letters and science, are deeply interested in the success of this university. More active steps will soon be taken for bringing it into operation. It is the property, and ought to be the pride, as it shall one day be, of Cincinnati. Our citizens should liberally contribute to its endowment. The Queen City herself, even apart from other resources, is able to establish it upon a permanent foundation.

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#### AMERICAN PATENT COMPANY.

The business of this company is so entirely new in this country, as to render it difficult to classify it. It is, in fact, a combination of almost every civilized business, as will be presently seen. It was incorporated in July, 1858, under the name of the American Patent Company, with a capital of one hundred thousand dollars, and procures patents from the United States and all European countries. It makes models, drawings, etc., for inventions; furnishes engravings of all kinds, on wood or stone; makes out sale and transfer papers; buys and sells patents on commission; conducts patent suits, prosecutes rejected applications for patents; builds machinery; makes calculations of power; furnishes designs; prints circulars, pamphlets and books; publishes the *Scientific Artisan* weekly; buys on commission any and everything needed by the manufacturer; and, in fact, does everything pertaining to pat-



ents and mechanical labor. Such an institution is destined to wield a very beneficial influence for the trade and manufacturers of this city, as well as the whole country — for it is actually a source of protection to both patentees as a class, and to the public. The following is a list of the officers and directors in the company : Wm. Resor, President ; R. S. Newton, Vice President ; H. E. Clifton, Secretary ; Geo. H. Hill, Thos. Sherlock, and N. Headington Directors, as are also the officers above named. The company's spacious establishment is represented in one of the pages of this volume.

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## XVI. MISCELLANEOUS.

### RECENT AND PROSPECTIVE CITY IMPROVEMENTS.

Within a few years a new style of building, both public and private edifices, has been introduced by our principal architects, greatly to the improvement of the public taste. Among these buildings are

The Seventh Presbyterian Church on Broadway.

The Central “ “ corner Mound and Barr sts.

V. Worthington's fine mansion on Pike street.

Robert Burnet's, on Seventh and Vine, and a number of stores, single or in blocks, of which the principal are,

Baker's buildings on Walnut street.

Taylor's block, on Second.

Perin, Gould & Co.'s blocks on Front.

Moore, Wilstach, Keys & Co., and Mitchell & Rammelsberg, on Fourth street, and Messrs. Albert, Day & Matlack, and Stadler's, all on Pearl street, which have been put up under the superintendence of Walter & Wilson, or executed under designs and plans furnished by them as architects. They are now engaged upon the Trinity Methodist Episcopal Church, on Ninth street, the Roman Catholic Institute on Vine street, W. K. Nixon's, and Heidelbach & Seasongood's stores on Vine street, the first at the corner of Fourth, and the second at that of Third street ; and the private residences of J. Netter on Eighth, and of Messrs. Dixon and Par-

ker, on Ninth street. Walter & Wilson's office is at the southeast corner Walnut and Fourth streets.

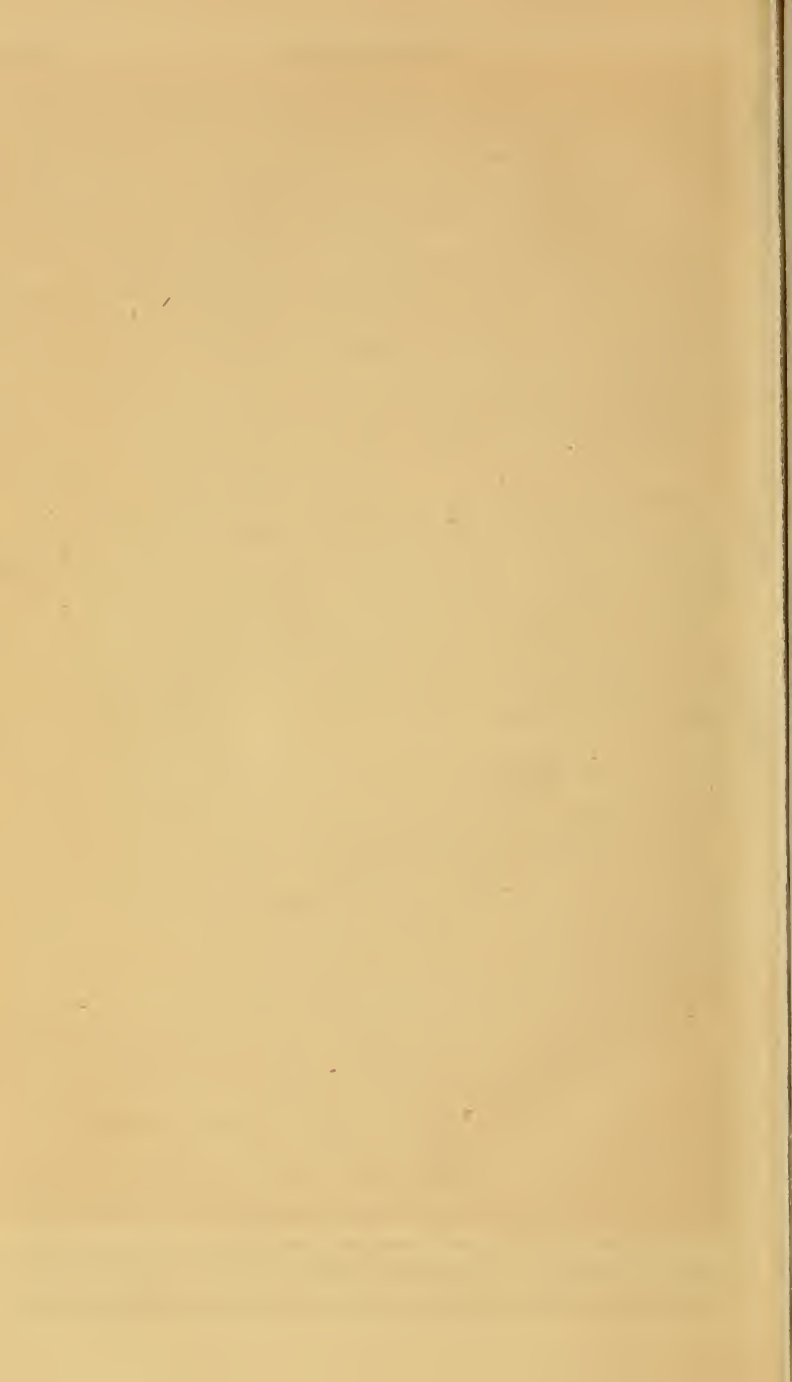
James W. McLaughlin, architect, northwest corner Third and Walnut streets. He has furnished designs for, or superintended the erection of, several fine buildings, among which are the residences of Edmund Dexter, corner Fourth and Broadway, and Judge Este, on Fourth near Park street, Derby's building, southwest corner Third and Walnut, Jno. Shillito & Co.'s dry goods palace, on Fourth street : the Masonic building, on Third street ; the Firemen's Insurance Company's block, at the intersection of Main and Front—all business edifices ; and of public buildings, the National Theatre, on Sycamore street, and the Masonic temple, southeast corner of Third and Walnut streets.

Mr. McLaughlin is now engaged on the new "*Commercial*" office, at the northeast corner Fourth and Race, two fine five story stores for J. Elsas & Co., on Pearl, near Race street, and three for A. & J. Wolf, on Vine, between Pearl and Second streets. A new R. C. Church on Mt. Adams, and the R. C. Church, St. Francis Seraphicus, at the intersection of Bremen and Liberty street, and has furnished designs which have been accepted by the public authorities, for a new and spacious City Hall, which will probably be commenced shortly.

Isaiah Rogers, Son & Co., office 168 Vine street. To the taste and skill of this firm, we owe the construction of many important public buildings—among the rest, the Burnet House—the latest of which is the new Lunatic Asylum at Carthage, which is the largest edifice of the kind in the State, having a front of six hundred and twelve feet, by a depth of three hundred feet, and which varies from three to five stories in height. They are about to commence building the new county jail, an edifice of one hundred and fifty feet square, with four tiers of cells. Also two stores on Fourth street, adjoining the Carlisle building, for W. B. Smith, forty feet by eighty-five feet, five stories in height, with Italian fronts.

Anderson & Hannaford, office 12 Manchester building. This is a recent establishment, which has been principally engaged on buildings outside of the city. They have furnished designs, plans or drawings for R. A. Whetstone's private mansion at Clifton, one of the largest in the place ; for two stores, five stories high, with stone fronts, on Main street, for George H. Brown ; two stores, with stone fronts, and five stories, on Main street, for A. H. An-







HAMILTON & McLAUGHLIN, ARCHITECTS.



**NEW MASONIC TEMPLE,  
CINCINNATI, O.**

From a Photograph by W. H. H.

ERIDOTT & FERGUSON, LITH. CH. O.



draws, of the firm of Miner & Andrews, and Thomas D. Carneal; a block of warehouses for John Hall, on Second street, and for residences to Chas. E. Matthews, east Walnut Hills, and Lewis Mehner, on Eighth near Freeman street, and J. F. Mills, of the firm of Mills & Kline, on Richmond, near Freeman street.

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### GRAPE CULTURE IN VINEYARDS.

This branch of agriculture has, within the last few years, been rapidly advancing in the United States, especially in the west and southwest. The grape is now cultivated in vineyards, for making wine, in twenty-one States of our Union. In Tennessee, Georgia, Alabama, and in North and South Carolina, the increase in this cultivation has been rapid and extensive. For the last three or four years past, the sales of grape roots and cuttings in Cincinnati, for the south and southwest, have averaged about two hundred thousand roots and four hundred thousand cuttings, annually, and principally of the catawba grape. The yield of wine to the acre, in these regions, thus far, exceeds that in the Ohio valley, which would appear to indicate a better climate for wine than ours.

The accounts of vineyard products in California are so very surprising as to appear like exaggerations, were we not already convinced of the existence of other remarkable productions in that new and wonderful country. If half we hear be true, it must be the most favorable wine region in the world. With the attention now given to wine farming, in so many of the States of our Union, it cannot longer be doubted that we shall ere long produce a great portion of the wine for home consumption, and probably some for export.

In the Ohio valley, for the last three or four years, the grape crop has been much injured by mildew and rot, diseases incident to bad seasons, or sudden atmospheric changes. Many remedies have been tried, but none has yet been found effectual in these cases. It is difficult, by any mode of vineyard cultivation, pruning or training, to conquer disease arising from atmospheric causes. The sulphur remedy, so efficient in France, in the last two years, has failed here, perhaps from imperfect application.

But with all these drawbacks, the wine planters are not discour-

aged ; the crop thus far has been more reliable than any other fruit crop, and quite as remunerative. The best evidence of this is in the rapid increase of the cultivation of the grape, and the numerous efforts made to find varieties to suit every portion of this fertile valley.

The number of acres in vineyard culture within twenty miles around Cincinnati, is now estimated at two thousand. An average yield for a series of years, is supposed to be two hundred gallons to the acre, which is about the average for France and Germany. From this data may be formed an estimate of the value of this crop when prepared for market—the wine being worth at the press, one dollar to one dollar and twenty-five cents per gallon, but from the cellars of the vintners, twenty-five to fifty per cent. more.

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#### SALT.

This is an article which has undergone more changes in this market, in price, quality, and source of supply, than perhaps any other that can be named. The early settlers had to pay six and even eight dollars per bushel for a vastly inferior article than can now be bought here for twenty-five cents. Even as late as 1815, the wholesale price here was three and a half to four dollars per bushel—seven to eight cents per lb. Until within a short period, the Kanawha salines were our principal sources of supply, but the best quality and largest quantity are now derived from our own State—salt being extensively made in and adjacent to Pomeroy, Meigs county. At this point is the head quarters and theatre of operations of the Ohio Salt Company, which owns eight salt furnaces, many of which are of recent construction and great capacity, with all the latest improvements.

Two millions of bushels—all first quality of salt—are annually made here, comprising every variety, from the finest table salt to the coarse alum or crystal salt employed in pork packing. Scientific analysis has shown that there is no purer article of salt manufactured anywhere than now supplies our market.

The office of this company is at No. 27 west Front street, Cincinnati. Luther F. Potter, sole agent.



## SEWING MACHINE.

In 1841, the value of ready-made clothing manufactured here was \$1,223,800, and in the lapse of the succeeding ten years these figures advanced only to \$1,947,500. In addition to the labor engaged in this manufacture, at the first period, of eight hundred and thirteen, and at the second date, of nine hundred and fifty hands employed in the workshops, there were, in 1841, more than four thousand women in this city and in Covington and Newport, who worked at their own homes for these establishments. That number must have increased fifty per cent. from 1841 to 1851, as the latter product shows. At this last date New York sold more ready-made clothing than all the cities in the United States beside.

Just at this period the sewing machine, then recently invented, was introduced into Cincinnati; here, as well as everywhere else, under the violent opposition of thousands, who predicted its advent a death-blow to female industry, it was at once seen that hand labor could not contend with machinery, and the conclusion was reached that women, already inadequately paid for the unhealthy and wearisome employment of sewing, would be, as a class, thrown out of employment. A brief period of time has, however, served to dissipate all prejudices. Sewing machines, each of which requires at least five, and may be made to furnish employment for eight or ten hands to prepare and finish clothing, are here in operation already to an extent which employs ten thousand females; and in lieu of the miserable pittance of one dollar and fifty cents to two dollars and fifty cents per week which they were paid heretofore, they now readily earn from three dollars fifty cents to seven dollars per week. Nor is the social change of less value than the pecuniary. In place of working from twelve to sixteen hours in the day, to the injury of their eyes, ten hours now suffice to earn these enhanced wages, and the work is all performed in daylight. There are not a few whose skill and care enable them to earn from eight to twenty dollars per week, and instances can be pointed out where forty to fifty dollars per week have been realized.

One great evil hitherto was, that not one woman in ten, who was compelled to earn her living by sewing, had properly learned the art, and therefore the greater number were unable to execute profitable work. This has been the great cause of suffering hereto-

fore. Now, the sewing machine divides the labor—as many as seventeen hands being employed upon a single pair of pants. Any one of these, if even a novice in sewing, has so small a portion to execute, that she can readily acquire a due proficiency in her single department. So of the rest. I rejoice, therefore, that the “song of the shirt” will now only remind us of the past.

The introduction of sewing machines has advanced our clothing manufacture from less than two millions to fifteen millions of dollars in value, which our present sales reach, and an extent which renders this the largest market in the United States for the article.

*Singer & Co.*—This is the original sewing machine, and, under repeated modifications and improvements, now comprehends twenty-five varieties of the article, and constitutes the whole range of sewing facilities, from stitching harness leather to the finest embroidery for millinery purposes; being equally adapted to the coarsest and strongest work, and to the lighter and delicate textures of the family circle. They will be found in the workshop of the saddler, the harness and carriage maker, the hat and cap manufacturer, the tailor, the boot and shoe maker, and the milliner, as well as where shirts or other fabrics are made by seamstresses and dress makers at their own homes. There are not less than one thousand of these machines in operation in Cincinnati, principally employed in the clothing manufacture.

The machines made under this patent are strong and durable, and, the principle of their construction being very simple, they are not liable to get out of order. They perform either coarse or fine sewing by simply changing the thread and needle. The same machine can stitch a shirt collar with neatness, or a leather harness trace with strength, and with the same degree of accuracy and ease. In any kind of sewing, one of these machines is equal, in capacity, to six persons, and in many kinds to twelve. One of the latest improved machines will complete one thousand stitches in a minute. It can be set so as to make any number of stitches, from two to forty, to the inch, or even more if requisite. Seams of every curve or angle, with cross or parallel lines, and of every combination in figure, can be made by it at pleasure. As these machines draw the thread but a short distance at a time, and make also a stronger pull than when sewing is done by hand, it is obvious that the thread is less worn, while the stitch is tighter, than in the ordinary process, even in the hands of expert seamstresses.

## HOTELS.

Among the principal hotels of Cincinnati, are the Burnet, Spencer, Gibson, Walnut Street, Southgate, Madison, and Galt houses, and the Broadway Hotel.

**BURNET HOUSE.**—This is one of the most spacious hotels in the world, and inferior to none in its interior arrangements. It was originally put up by a joint stock company, but is now owned as it has heretofore been occupied by A. B. Coleman, having recently passed, under lease, into the hands of Johnson, Saunders & Co.

The building, including the terrace is two hundred and twelve feet on Third street, and two hundred and ten feet to its rear on Burnet street. Its style of architecture is the bracketed Italian. It is six stories in height, with a dome forty-two feet in diameter, which is one hundred feet above the basement floor. The observatory commands a fine view of the city, and more particularly of the river Ohio and the Kentucky scenery beyond, being one hundred and forty-two feet above the level of the street on which it fronts. The entire house contains three hundred and forty rooms, all properly lighted and ventilated. The Burnet House is central to the river and canal, and to all traveling public landings and railway depots.

**GIBSON HOUSE.**—Geffroy & Gibson, proprietors. This is located on the west side of Walnut, between Fourth and Fifth streets, and is seventy feet front by two hundred feet deep. It is convenient to the general business region of the city, and is immediately adjacent to the College buildings, which are occupied by the Chamber of Commerce, the Merchants' Exchange, and the Young Men's Library Association. The Gibson House comprehends one hundred and fifty-nine chambers and parlors, and can seat two hundred and fifty guests at the public table. The dining room is one hundred, by thirty feet, with an elevation of twenty feet to the ceiling. The house is heated, and the cooking and washing done entirely by steam. A corridor, extending the entire length of the rear building, affords entrance to each series of chambers, adding also to the light and ventilation of the various rooms. The main staircase is spiral, of great beauty, convenience and safety, a dome and skylight gracefully crowning the entire ascent. The construction of the Gibson House affords peculiar advantage to travelers in

whose case order and quiet repose are desirable. From the nature of the building, which possesses but one entry on a floor, and with staircases to the entire house, of a character which do not reverberate sound, there need not be, and there is not, more disturbance during sleeping hours than in an ordinary private house.

The Gibson House has been recently refitted and refurnished at an expense of forty thousand dollars, so as to render it equal to a perfectly new edifice. The day before this volume went to press, four hundred and twenty guests sat down to the dinner table of this establishment.

**WALNUT STREET HOUSE.**—J. W. Sweney, proprietor. This is a very commodious edifice, recently refitted and put in thorough order. It covers thirteen thousand square feet of ground, is five stories high, exclusive of its basement, and comprehends one hundred and eighty-three rooms, all of convenient size and arrangement, and many of them spacious and elegant.

The floors of the basement rooms are covered with cast iron plates, and tessellated with marble tiles. The residue of the house is carpeted throughout. The dining room is one of the finest to be seen in Cincinnati, if not anywhere. It is ninety by forty feet, with a height of twenty feet. The entire furniture of this house cost not less than thirty-five thousand dollars.

A magnificent view for miles in all directions is afforded by an observatory at the summit of the building.

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## OYSTERS.

The oyster trade of Cincinnati is an important interest, which is rapidly increasing. I have made inquiry into the facts and present them substantially.

The season commences about the first of September, and closes about the first of May, continuing two hundred and forty days. The importations are chiefly from Baltimore, and average one hundred cases, or one thousand six hundred cans, and ten barrels shell oysters per diem. This is equivalent to three hundred and eighty-four thousand cans, and two thousand four hundred barrels per annum. Of the above, the cans are all imported per the Adams' Express Company, and the shell oysters by the other express companies. In addition, however, it is estimated that about twenty thou-



sand dollars' worth are imported from other points. The quality is governed by the size of the oysters. Of the small kinds, there are twelve or thirteen dozen in a can; of the medium size, about ten dozen, and of the largest, which are retailed at one dollar and fifty cents, there are seven or eight dozen, generally the former number. Each barrel contains fifty dozen, or six hundred oysters in the shell. The shell oysters are all consumed in this market, but a large portion of those brought in cans are reshipped to neighboring towns and cities. The sales of this article here reach four hundred thousand dollars. The heaviest importers are H. L. Stiles, Walnut street, and R. Orr, Fifth street. They receive about three fourths of the entire quantity imported, and the remainder are distributed among numerous dealers. In the months of December, January and February, when the largest demand for oysters exists, the importations often exceed one hundred and sixty cases, and twenty-five barrels per diem.

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#### COAL.

The whole amount of coal consumed in Cincinnati, in the year 1841, was one million nine hundred thousand and fifty bushels. In 1851, seven millions seven hundred eighty-five thousand bushels. Our present consumption will enlarge these figures to fifteen millions bushels. This amount includes what is used for manufacturing purposes, and what is sent into the interior to various points contiguous to Cincinnati.

There are sixty-eight coal yards in the city, and scattered over every part of it.

John Cochnower, who has ten yards and six sale offices, is the largest coal dealer in Cincinnati. Principal office, northwest corner Western Row and Third street.

The coal which left the valley of the Monongahela, in the course of the year 1858, reached twenty-eight millions six hundred and ninety-six thousand six hundred and sixty-nine bushels, near ten millions of which quantity came down in the December flood of that month. One third, nearly, of this quantity was disposed of in this market.

Established

in 1850.

# JAMES F. MELINE & CO., BANKERS

AND DEALERS IN

## FOREIGN AND DOMESTIC EXCHANGE,

No. 17 West Third Street, Cincinnati.

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IN SUMS TO SUIT,

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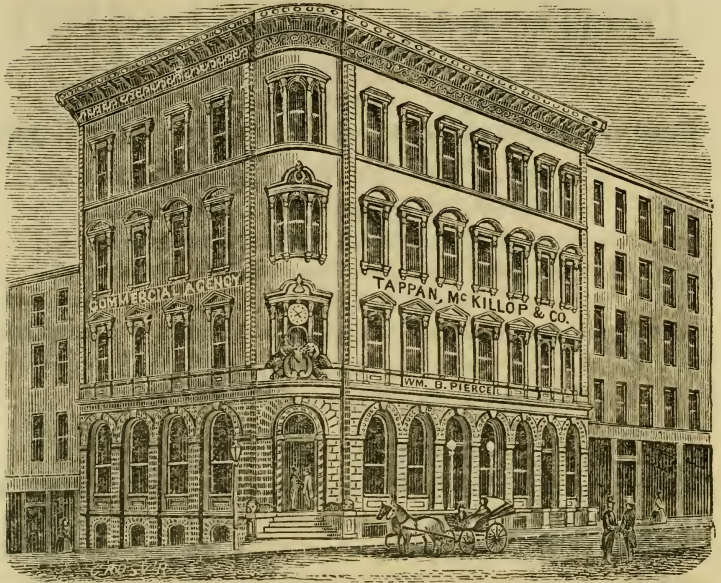
Among our principal European correspondents are—

- |                                         |                                   |
|-----------------------------------------|-----------------------------------|
| HOTTINGUER & Co., Paris;                | BIANCONE, BUSCH & Co., Hamburg;   |
| NEBEL, SON & Co., Strasburg;            | SCHULTZE & WOLDE, Bremen;         |
| HOPE & Co., Amsterdam;                  | J. ABR. ARNTHAL, Cassel;          |
| ANHALT & WAGENER, Berlin;               | G. MULLER & CONSORTEN, Carlsruhe; |
| DE NEUFVILLE, MERTENS & Co., Frankfort; | J. VON HIRSCH, Munich;            |
| WESTERKAMP & FORTLAGE, Osuabruck;       | LABOUCHERE & Co., Rotterdam;      |
| PASSAVANT & Co., Basle;                 | MARCUARD & Co., Berne.            |

CINCINNATI, March 1, 1859.

JAMES F. MELINE & Co.

# COMMERCIAL AGENCY.



## TAPPAN, M'KILLOP & CO.,

WM. B. PIERCE, Director.

Derby's Building, 2nd floor, S. W. Cor. Third and Walnut Sts.,  
CINCINNATI, OHIO.

For the use of Merchants, Bankers, Manufacturers, and all who sell on credit or have claims to collect.

This Institution owes its origin to Lewis Tappan, Esq., who devised and established the first Agency of the kind at New York, in the year 1841. In 1842, Wm. B. Pierce, then an Attorney at Albany, New York, and a nephew of Mr. Tappan, became associated with him as correspondent from that city. In 1849 Mr. Pierce removed to the West and established the first Agency at Cincinnati. The next year, 1850, he established similar offices at Louisville and St. Louis, all bearing the style of Mercantile Agencies. These have since passed into other hands, as has also the original office in New York City. The *Commercial Agency* was also established by Mr. Pierce at Cincinnati, in 1855, and has remained in his charge ever since. It has associates in most of the principal cities of the United States, England and Scotland, and has Collecting Agents in Ireland, France and Germany. Its principal associate office in New York City was established in 1842, and was designed as an improvement upon the office of Mr. Tappan, it being the first which extended its business over the whole country—Mr. Tappan having until then limited his operations to the Northern States.

CINCINNATI AND ST. LOUIS!  
THROUGH WITHOUT CHANGE OF CARS:  
~~~~~  
OHIO AND MISSISSIPPI
BROAD GAUGE RAILROAD,
FOR
Louisville, Vincennes, Evansville, Cairo, and
SAINT LOUIS!
CONNECTING AT ST. LOUIS FOR ALL PLACES IN
KANSAS AND NEBRASKA,
Memphis, Vicksburg, Natchez, and New Orleans; at
CAIRO,
FOR MEMPHIS, VICKSBURG, NATCHEZ & NEW ORLEANS.

AT NEW ORLEANS FOR

Galveston and all Places in Southern Texas.

~~~~~

NOTICE.—The attention of persons emigrating west, is called to the fine timber lands between Cincinnati and Vincennes. Hickory, black and white walnut, sugar maple, poplar, oak and ash abound. To those who prefer prairie lands of superior quality, and at favorable rates, a fine opportunity is offered for selection between Vincennes and St. Louis, with all the benefits of a mild climate. Farmers on the line of the Mississippi railroad have the advantage of the two great western markets—Cincinnati and St. Louis.

Ask for Tickets via Ohio and Mississippi Railroad.

COMFORT.—Broad gauge saloon cars through from Cincinnati to St. Louis, WITHOUT CHANGE.

ONLY ONE CHANGE OF CARS between Cincinnati, Louisville, Evansville or Cairo.

Trains leave Cincinnati in connection with trains on all the Eastern railroads. One through train on Sunday.

THROUGH TICKETS, to the South and West, via Cincinnati and Ohio and Mississippi Railroad, can be procured at all the Eastern railroad ticket offices, and at all the principal stations on roads east of Cincinnati, and at the several offices of the Company at Cincinnati.

W. H. CLEMENT, *General Superintendent.*

P. W. STRADER, *Gen. Ticket Ag't, Cin.*



# PRO BONO PUBLICO.

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We invite attention to the fact that, having greatly increased our facilities by enlarging our store to more than twice its former size, we are prepared to supply all orders for the very best of goods in our line, and at a small advance. Our long experience in public life, making extensive acquaintances, eminently fits us for caterers to the public taste, and we have no hesitation in saying—from the approval we have already received—that our selections are suited to to the demands of the consumer.

**BRANDIES.**—We have some very old Brandy, which has been pronounced by competent judges the best in the city; by the bottle, case, or casks.

**BOURBON WHISKY.**—We have a large stock of Howard's and Harp's Old Bourbon—some of it over six years of age—which is unsurpassed for smoothness and richness of flavor, and which we warrant perfectly pure; by the bottle, case, or draft.

**WINES.**—Our stock of Wines is large and well selected—both Madeira and Sherry.

**PORT.**—Our Pure Juice Port is a delightful article for medicinal purposes, being free from adulterations, and having age to make it soft and pleasant.

**APPLE BRANDY.**—We have a very superior article, which we warrant pure; and, in fact, we will only sell such articles as we can recommend, and are willing should bear our label.

We have, also, the best of all Liquors, Cordials, and **STOMACH BITTERS.** Barton & Guestier's best **OLIVE OIL.**

Choice *Green* and *Black Teas*, including the celebrated *English Breakfast Tea.* **SARDINES** and **STAR CANDLES**, etc., etc.

Particular attention paid to our selection of **HAVANA CIGARS**, of which we have a fine assortment of the choicest brands, which we sell by the box or thousand.

**TRAVELING LUNCH BASKETS.**—A fine assortment, and particularly adapted for travelers' use.

As our goods have been selected from the best markets, and purchased for cash, we are prepared to offer inducements to all, and respectfully solicit the patronage of the public.

E. B. & W. B. COLEMAN,  
5 and 6 Burnet House Building.

CINCINNATI

CHEMICAL LABORATORY,

Junction of east Pearl and Front Streets,

AND IMMEDIATELY EAST OF THE LITTLE MIAMI RAILROAD DEPOT.

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EUGENE GRASSELLI, Proprietor,

---

*Manufacturing, Analytical and Consulting*

CHEMIST.

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MANUFACTURES

Sulphuric Acid, concentrated in Platina,  
Pure Sulphuric Acid,  
Aqua Fortis,  
Pure Nitric Acid,  
Muriatic Acid,  
Pure Muriatic Acid,  
Pure Hydriodate Potassa,  
Copperas,  
Sulphuric Ether,  
Nitrous Ether,  
Acetic Ether,  
Aqua Ammonia,  
Cannel Coal Burning Oil,  
Cannel Coal Lubricating Oil,  
Pure Paraffine,  
Aromatic Mustard, etc.

**ALLEN & CO., Agents,**

Southwest corner of Main and Fifth streets.

ALL ORDERS PROMPTLY ATTENDED TO.

# STAR AND ADAMANTINE CANDLES.

---

The attention of the public is invited to the fact, that most of the Star and Adamantine Candles offered for sale, are

## Deficient in Weight.

So that what is sold for a pound, actually weighs but fourteen or fifteen ounces, and packages marked "40 lbs.," fall short two, three, and even five pounds to the box. This loss does not fall upon the Wholesale Dealers, who sell packages at the MARKED WEIGHT, nor upon the Retailers who sell BY COUNT, but upon the consumers, who thus pay for about one-tenth more than they receive.

Many Candles that are really seven to the pound, are branded and sold as sixes, making a difference against the consumer of five pounds to the box. The variation usually made in the price is not proportioned to this difference, as the following statement shows :

*A box of sevens contains 247 Candles, and is sold for thirty-five pounds, which is the actual weight.*

*A box of fourteen ounce, or "Short Weight Sixes," contains only 240 Candles, same size as the Sevens, and is sold for forty pounds.*

Supposing the price of the former to be twenty cents, and the latter eighteen cents, there will be a difference of twenty cents in price, and seven candles in count per box, in favor of the full weight Candle to retailers and consumers; and this will be increased five cents per box for every cent advanced in price.

The subscribers have always made their Candles full sixteen ounces to the pound, and marked packages at the real weight, which may be ascertained by testing them. As their experience in the business enables them to offer an article equal in quality to any in the market, they solicit the patronage of purchasers who desire to study their own interest, and at the same time encourage correct dealing.

**PROCTER & GAMBLE,**

NO. 24 WEST SECOND STREET,

CINCINNATI, O.

# S. W. HASELTINE & CO.

No. 171 Walnut Street, Cincinnati, Ohio,

## AGRICULTURAL WAREHOUSE

AND

## SEED STORE,

SELLS

**Landreth's & Thorburn's Warranted Genuine Fresh Seeds.**

---

Especial care is taken that all Seeds are fresh, and the very best of the kind which can be obtained from reliable parties at home and abroad.

Roses, Dahlias, Phloxes, Geraniums, Verbenas, Petunias, and Bedding Plants of the Choicest Varieties, including the newest and most desirable

### **GREEN-HOUSE PLANTS, IN GREAT VARIETY.**

Grape Roots and cuttings of all desirable kinds, Gooseberries, Currants, Raspberries, Rhubarb, Asparagus, etc.

Books on Farming, Manures, Gardening, Fruits, Cattle, Horses, Sheep, Swine, Poultry, etc., the latest and best works.

*Gardening and Farming Tools of every Description.*

DEALERS IN

### **AGRICULTURAL AND HORTICULTURAL IMPLEMENTS AND MACHINERY.**

Fruit and Ornamental Trees, Shrubs, Evergreens, etc., sent to order, carefully packed, from the best Nurseries and Conservatories in the United States.

### **GREEN FRUITS.**

Personal attention given to all selections from the best and most reliable sources, to complete orders, which are solicited.



# PRO BONO PUBLICO.

## WHITE'S BANK NOTE REPORTER, AND COUNTERFEIT DETECTOR,

ESTABLISHED IN APRIL, 1853,

And at the time of its commencement it was a mere local affair, reporting only the rates of the proprietor, who was at that time an Exchange and Money Broker. Notwithstanding the many disadvantages under which all similar publications labor, WHITE'S REPORTER gradually increased in numbers, and continued to grow in favor. On the first day of January, 1859, a new plan, and the one upon which the REPORTER is now published, was conceived and adopted.

The plan is this: The proprietor withdrew from the exchange and banking business, and determined to concentrate all his efforts in producing the most comprehensive and reliable monetary guide in the United States. And in order to make it *comprehensive*, four prominent cities were selected—NEW YORK, CINCINNATI, LOUISVILLE and ST. LOUIS—for its publication; and that it should be *reliable*, a banking firm of undoubted character was engaged in each of these cities to correct the quotations, who pledge themselves to buy all money as quoted, and thus indorse the REPORTER.

The arrangement is working beautifully and advantageously, and all thinking men must agree that the above is the true principle upon which such a periodical should be conducted.

### TERMS.

WHITE'S REPORTER is issued regularly and promptly on the first and fifteenth of every month, at \$1 50 monthly, and \$2 00 semi-monthly. Two supplementary works are given, *free of charge*—*The Descriptor of Genuine Bank Notes*, and *White's Coins of the World*.

N. B.—Office in Cincinnati, on the corner of Walnut and Gano Streets.

## DR. CHURCHILL'S SPECIFIC REMEDIES.

*Syrup of the Hypophosphites, Composed of the Hypophosphites of Lime, Soda, Potassa, and Iron.*

These remedies were brought to notice by DR. JOHN FRANCIS CHURCHILL, and have attracted much attention from the medical profession. To give a general idea of their action, we make the following extracts from DR. CHURCHILL'S paper "*On the Proximate Cause and Specific Remedy of Tuberculosis*," read before the Academy of Medicine, Paris, July, 1857. Says Dr. C.:

"The total number of cases of Phthisis treated by me amounts to thirty-five. All were either in the second or third stages of the complaint; that is, they had either softened tubercles or cavities in the lungs: of these, nine recovered completely, the physical signs of the disease disappearing altogether in eight out of that number; eleven improved considerably, and fourteen died. The results will be found to justify the following conclusions:

"The proximate cause, or at all events an essential condition of the tubercular diathesis, is the decrease in the system of the phosphorus which it contains in an oxygenizable state.

"The specific remedy of the disease consists in the use of a preparation of phosphorus, uniting the two conditions, being in such a state that it may be directly assimilated, and at the same time at the lowest possible degree of oxydation.

"The effects of these salts upon the tubercular diathesis is immediate; all the general symptoms of the disease disappearing with a rapidity which is really marvelous. If the pathological deposit produced by the dyscracy is of recent formation, if softening has only just set in, and does not proceed too rapidly, the tubercles are re-absorbed and disappear. When the softening has attained a certain degree, it sometimes continues in spite of the treatment; and the issue of the disease then depends upon the anatomical condition of the local lesion, on its extent, and upon the existence or non-existence of complications.

"The physiological effects show these preparations to have a twofold action: on the one hand they increase the principle, whatever that may be, which constitutes nervous force, and on the other, they elevate the tone of the several functions concerned in alimentation and nutrition."

The success of this treatment being so much in advance of anything before attained in the management of this heretofore almost incurable disease, calls for a thorough testing of these remedies. With this view the combination here offered in the form of syrup has been made.

The beneficial effects of these Salts are not limited to Consumption alone; they are appropriate remedies in a large class of affections resulting from loss of nervous force, Dyspepsia, Scrofula, debilitated conditions of females, lack of vital action in children, and where the osseous system is defective.

W. J. M. GORDON & BROTHER,

Manufact'ng Chemists and Pharmaceutists, N. E. cor. Western Row and Eighth St.

# Queen City Terra Cotta Works.

Office, No. 76 West Third Street.

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On hand and made to order,

## WINDOW AND DOOR CAPS,

COLUMNS, PINNACLES AND CORNICES,

## DOOR, WINDOW AND TRUSS BRACKETS,

Medallion or Cornice Brackets,

And every variety of

## ORNAMENTAL BUILDING WORK,

Equal in every respect to stone, and at one third, or less, in price.

Statuary, Dogs, Lions, Vases, Etc.,

Suitable for ornamenting Buildings, Gardens, Yards, etc.

## MARBLEIZED MANTLES,

Cheaper and better than in any other material.

## WATER AND SEWERAGE PIPE.

---

## BUILDERS, ARCHITECTS,

And all others who wish to save money and get a superior article, are respectfully invited to call and examine for themselves.

*RS* Orders punctually attended to, and all work warranted.

FACTORY,

Corner John and Betts Streets,

CINCINNATI.

CHAS. D. FOOTE & CO.

# BELLS! BELLS! BELLS!

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The subscriber is extensively engaged in manufacturing

## **BELLS OF EVERY SIZE**

USED BY

Churches, Colleges, Public Buildings, Steam-boats, Plantations, etc.

His Bells are constructed upon true and correct principles in their form and thickness, and in the proportion and combination of metals ; thus attaining

### **The Greatest Degree of Sonorousness,**

The most melodious tone, and the requisite strength and durability.

An assortment of medium sizes are kept on hand, enabling purchasers to hear and judge of their quality for themselves.

Larger sizes, and, if desired, of a particular tone and key, and

*Chimes of any Number or Size of Bells,*

cast at a short notice.

Bells cast at this foundery are furnished with springs, to prevent the unpleasant sound produced by the clapper jarring on the Bell, and the most approved plan of iron yokes, wheels and frames.

A warrantee against breakage of Bell or hangings—if properly rung—is given for one year. Communications will receive prompt attention by addressing

**GEORGE L. HANKS,**

*Nos. 120 and 122 East Second Street, Cincinnati.*



# SINGER'S SEWING MACHINES.

Prices, \$50, \$75, \$110, and \$125.

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The long-continued, increasing, and wide-spread popularity of Singer's *Standard Sewing Machines*, for all manufacturing purposes, proves incontestibly their superior merit. They have always commanded a higher price than other Sewing Machines, simply because they were worth it. Greatly increased manufacturing facilities have enabled us to make a reduction of \$25 in the price of each Machine. Since this reduction, made October 1, 1858, our sales of Machines have increased more than

FOUR HUNDRED PER CENT.

For all the various workers on cloth and leather, who rely upon their work for a living, no Sewing Machine has ever yet been produced which is fit to correspond with Singer's No. 1 and No. 2 Standard Machines.

## SINGER'S NEW FAMILY MACHINE

Is a light, elegant and rapid Sewing Machine, capable of executing a greater variety of work than other popular Sewing Machines for family purposes, and is sold all complete for use, at the extreme low price of

FIFTY DOLLARS.

It has achieved a great reputation in a few months.

## Singer's Transverse Shuttle Machine

Is entirely new in its arrangement, differing in appearance and mode of operating from every other Machine before the public. It is designed for all kinds of family sewing, and is admirably adapted to various light manufacturing purposes. As an elegant

and efficient assistant in private families, its superiority over all the family Sewing Machines heretofore sold is palpable even upon such an examination as any unskillful person can make. It has not been possible thus far to supply the demand for these Machines.

The general characteristics of Singer's Machines, of all sizes and descriptions are, durability, facility with which the mastery of them can be acquired, capacity to perform all kinds of work, and the rapidity and perfection with which every kind of sewing can be done. All of these Machines make the best kind of stitch known.

Hemming gauges, binding gauges, and every other attachment known to Sewing Machines, of the most approved and effective styles, applied in the most convenient manner.

All persons who wish to obtain full and reliable information about Sewing Machines, and all articles used with them, the sizes, prices, modes of transportation, etc., can procure it by sending for a copy of

I. M. SINGER & CO.'S GAZETTE,

A beautiful pictorial paper, which is entirely devoted to Sewing Machine interests. *It will be supplied gratis.*

**I. M. SINGER & CO.,**

458 Broadway, New York.

Branch Office, No. 8 East Fourth Street, Cincinnati.

Our agent at this office, Mr. James Skardon, keeps always on hand, a good supply of our Machines of the latest improvements; also, an assortment of machine twist, thread, needles, and every article connected with the business. We would recommend all persons in the west, who may desire any information, to communicate with this office.

No. 8 east Fourth street, Cincinnati, O.

# BRUEN'S NEW PATENT SEWING MACHINE!

THE ONLY ONE NOW MADE THAT

**Sews with a Double Thread,**

*Which can in a moment be changed to a Single one.*

Price, \$35 and \$40.

THE NEW YORK SEWING MACHINE COMPANY,

In offering this machine to the public in competition with so many other machines, say, in perfect confidence, that they are fully satisfied it is the very best double-thread machine now manufactured, for the following reasons:

*First*—It is single and double thread combined; and, as many kinds of work require only a single thread, there will be a corresponding saving of cotton.

*Second*—It makes a firm, elastic stitch, which will not ravel, though every third stitch is cut.

*Third*—The feed, which is a very important matter in a sewing machine, is adjustable, and can be so arranged as to sew on the finest fabric, and then run up to any required thickness, with but slight alteration of the tension of the thread.

*Fourth*—The intermediate pressure placed in front of the feed, to hold the cloth while the former goes back, is a happy discovery, entirely new, and insures a positive stitch; at the same time, it supports and consequently prevents the breaking of needles, which is a great point gained, as most other machines are rendered very expensive by the frequent breaking of them, so much so, that their economy has been questioned.

*Fifth*—This machine makes a more beautiful stitch and approximates nearer to a shuttle stitch than any other now made, and on cloth can scarcely be distinguished from it.

*Sixth*—This machine is operated by a belt, and can be raised up to adjust the under spool and looper without removing the belt, and sews with the machine thus raised the same as when in its proper place, which is a great convenience in threading and spooling the under looper.

*Seventh*—The thread tightener on this machine is so arranged that the spool is placed on a triangular spindle securely, the spindle turning on centers with the spool; and after you have the proper tension, it does not require to be changed until the thread is entirely run off the spool.

It sews from two ordinary spools, thus avoiding the trouble of winding. It runs silk, linen threads and common spool cotton with equal facility, and is so simple in its construction, and so arranged that a young girl of ten years could operate it.

The salesrooms are No. 7, under the Burnet House, on Third street, where the machines will be exhibited with pleasure to any one who may call.

W. B. COLEMAN,

Sole agent for the Western and Southern States.

# G. C. KNIFFIN,

Dealer in

LADD, WEBSTER & CO.'S

Late

*Hunt, Webster & Co.'s Improved Manufacturing*

And

## FAMILY SEWING MACHINES.

6

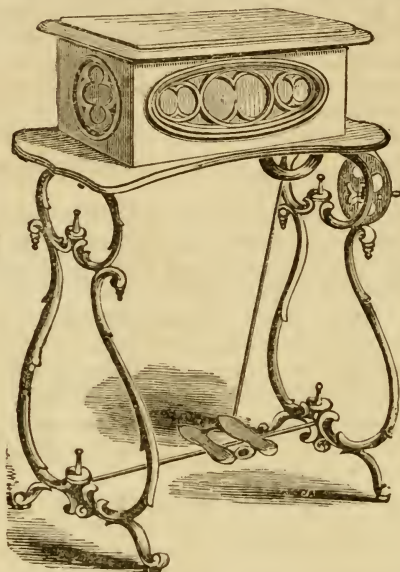
West

FOURTH

STREET,

Cincinnati,

OHIO.



6

West

FOURTH

STREET,

Cincinnati,

OHIO.

*Great Reduction in Prices.*—Silver medals awarded by the Virginia State Fair, Mechanics' Fair in Baltimore, and Massachusetts State Fair.

These machines will stitch, hem, fell, bind and gather. They make a strong lock stitch, that cannot be raveled or pulled out. They make a beautiful, uniform stitch, alike on both sides of the work, without forming ridges underneath.

The machines have great strength, are perfectly simple, and the management of them easily acquired. Any spool of cotton, thread or silk may be used without re-winding.

They are the only lock stitch family machine in use that will use skeined linen thread. The advantage of this for sewing heavy Jeans must be apparent. They will sew the finest Barege or Lawn without "drawing" it.

*Hem Folders*, of improved style and finish, accompany each machine. All machines warranted, and full instructions given, to enable purchasers to use them satisfactorily.

*RS* Send for a Circular.





THE LARGEST STEAM POWER

BILLIARD TABLE MANUFACTORY

IN THE UNITED STATES.

**J. M. BRUNSWICK & BROTHER,**

PROPRIETORS,

CINCINNATI, O.

Brunswick's Improved Model Billiard  
Tables and Patent Combination  
Cushions, protected by Letters  
Patent, dated Dec. 8, 1857.



This is the only true Patent Combination Cushion now in existence, and pronounced to be the best in the world for excellence in speed and truth of angles. The most of the recent improvements in the manufacture of these tables is highly appreciated by all scientific billiard players, and preferred to any billiard table now in use. Parties wishing to open club or billiard rooms would do well to address or call on J. M. Brunswick & Brother at their office and sales-rooms, No. 8 West Sixth street, opposite the Galt House. Factory N. E. corner of Elm and Canal streets, Cincinnati.

They also keep on hand a well selected stock of BILLIARD TABLES of every description, One-Leather, Chalk, Billiard Balls, Cloths, Pockets, Cues, etc., which can be had to better advantage than elsewhere. Old Billiard Tables re-cushioned under the letters patent at the shortest notice.

These Tables are in use at the principal billiard saloons throughout the country; among which we name Buckeye, International, Apollo Hall, and Marble Hall Saloons, Cincinnati, O.; St. Charles and Marble Hall Saloons, New Orleans; Billing's Saloon, St. Louis beside others too numerous to name. These seven establishments have sixty-six of our Tables in service.

# APPLEGATE & CO.

## Booksellers, Publishers,

### STATIONERS, PRINTERS,

—AND—

## BLANK BOOK MANUFACTURERS,

No. 43 Main Street, below Second, Cincinnati.



We have one of the largest and best assorted stocks in the West. Our stock embraces the best works on Theology, Medicine, Law, Mechanics, Agriculture, History, Travels, Tales, Memoirs, Philosophy, &c., and a complete assortment of all the most desirable MISCELLANEOUS BOOKS published. Our stock of

### SCHOOL BOOKS

Embraces all books of merit used in the West. Our stock of

### Stationery

Embraces every variety of Blank Books, from the smallest Memorandum Book to the largest super-royal Ledger, including every article used in the counting-room. We have for the COUNTRY MERCHANTS a full variety of

Letter, Cap, and Note Paper, Envelopes, Wrapping Paper, Bonnet Boards, Ink, &c.

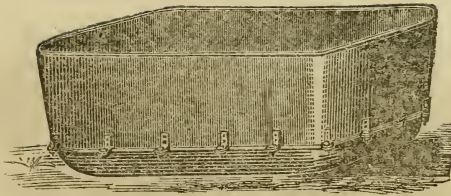
Our own publications are too well known as works of the highest merit, to require more than an enumeration of the most prominent, which are

*Clarke's Commentary, Dr. Dick's Complete Works, Rollin's Ancient History, Plutarch's Lives, Spectator, Josephus, Mosheim's Church History, Speeches and Writings of Hon. Thos. Marshall of Ky., Shakspeare's Complete Works, Chain Sacred Wonders, Dick's Theology, Life of Dr. Daniel Drake, Soden's Elements of the German Language, Peterson's Familiar Science, &c., &c.*

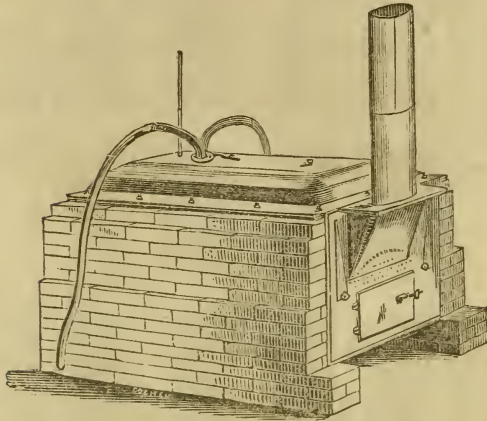
We invite all who deal in, or purchase Books, to give us a call, as we are confident we can offer them such inducements as shall be mutually beneficial. JUST PUBLISHED, A NEW EDITION OF

## WEBB'S FREEMASON'S MONITOR,

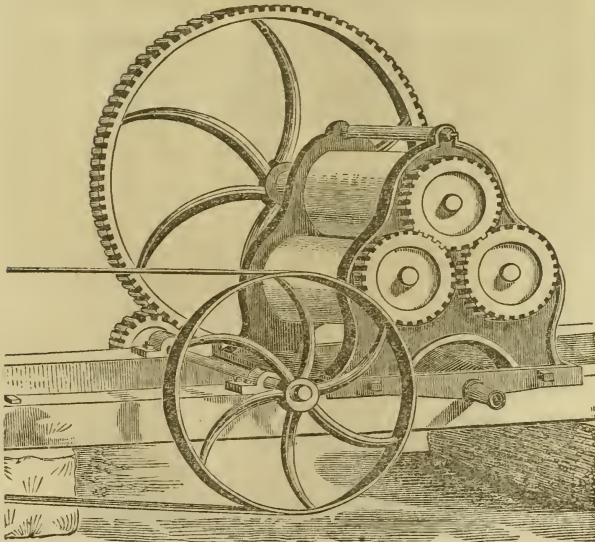
The best Masonic Book Extant.



HEDGES, FREE & CO.'S OVAL UNION CAULDRON.



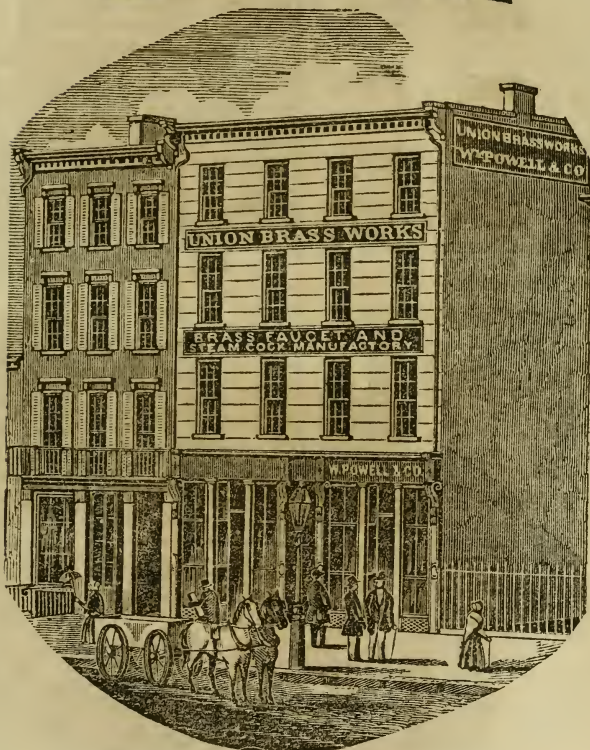
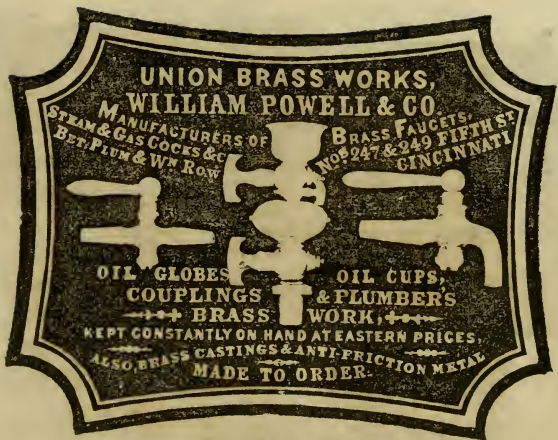
HEDGES, FREE & CO.'S ENTIRE BOILER.



HEDGES, FREE & CO.'S HORIZONTAL BACK GEARED MILL.

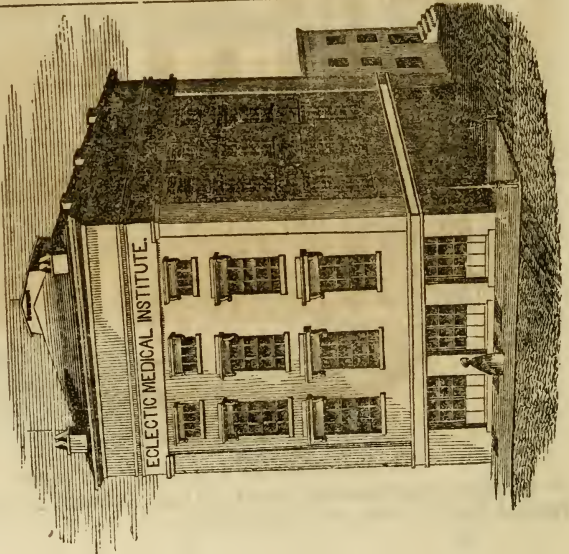
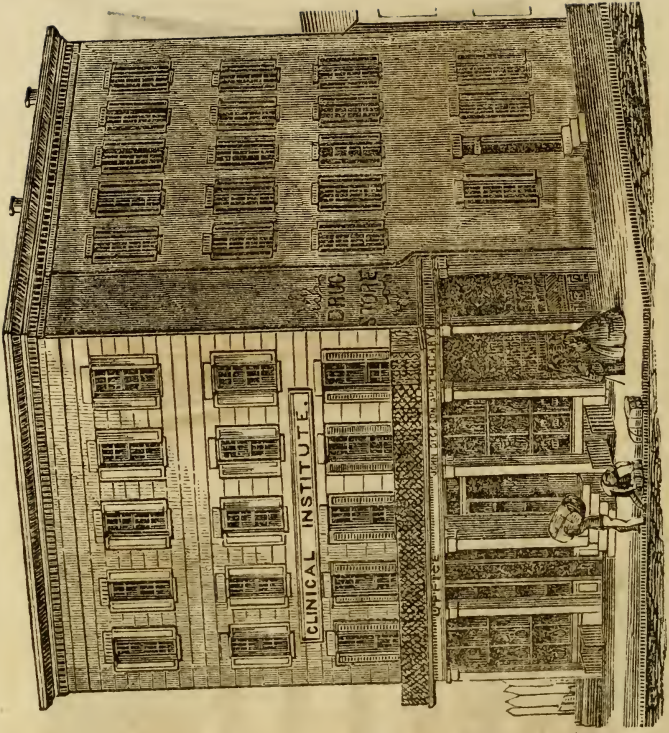




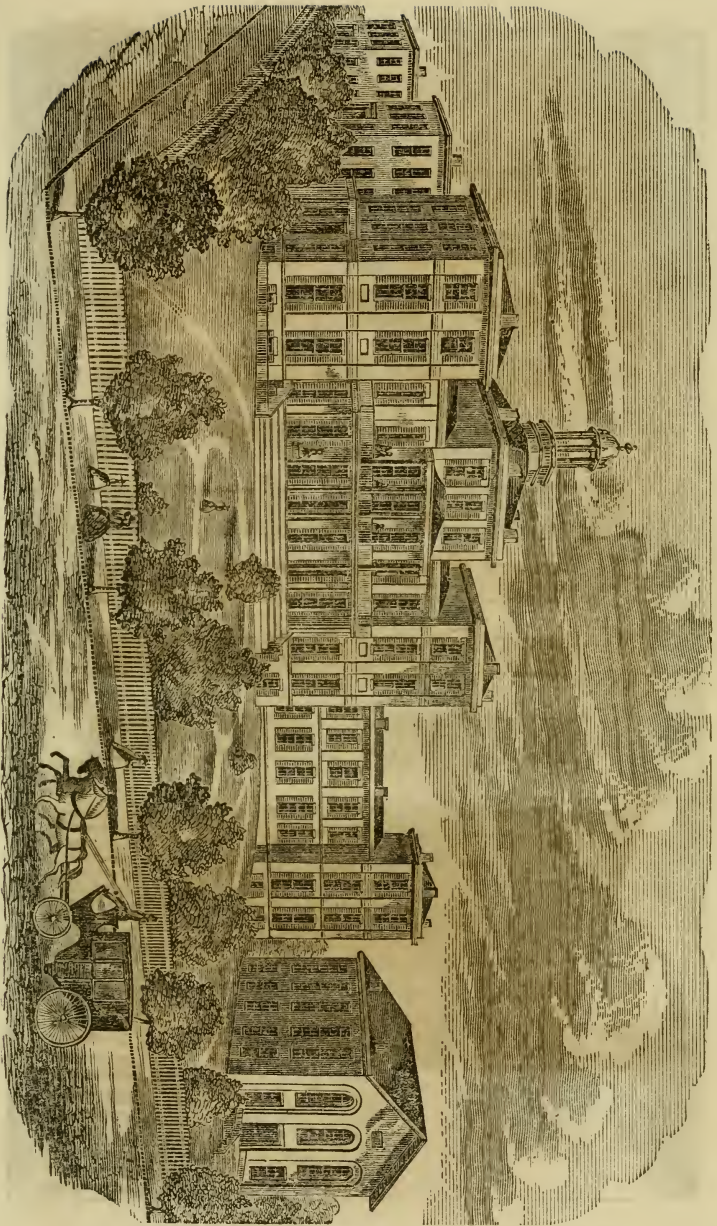


PATENTEES AND MANUFACTURERS

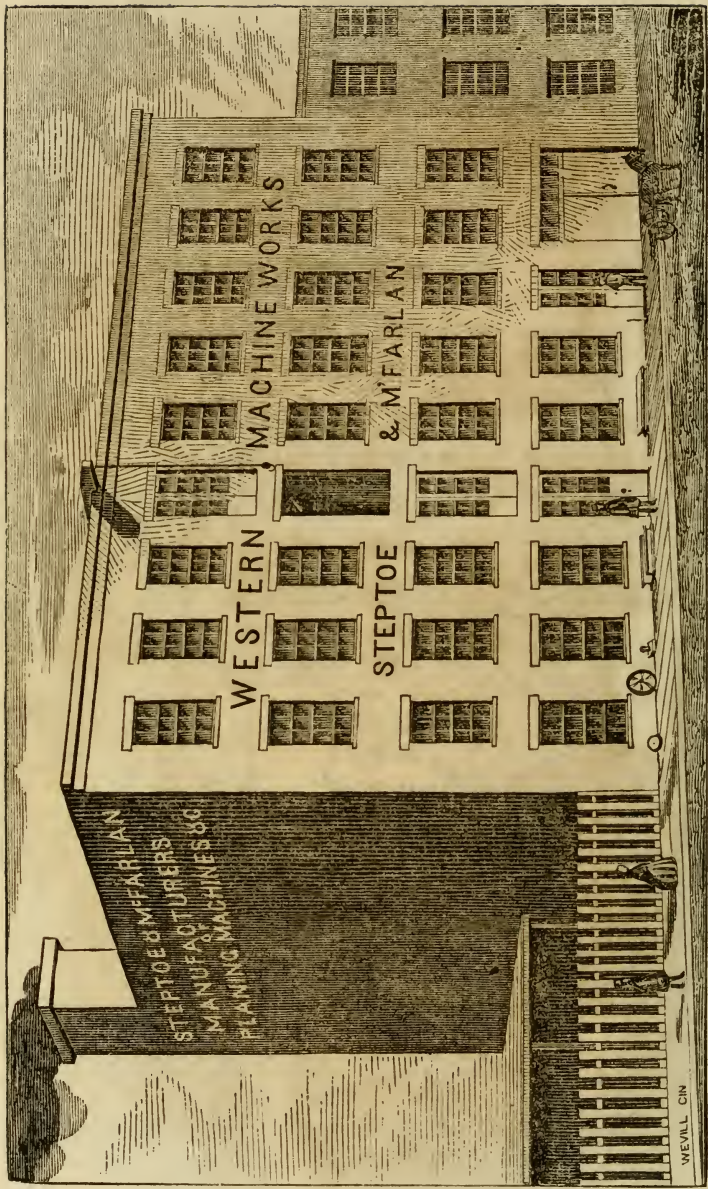
Of the Elastic Plug Faucet for hot and cold water, and will not injure by freezing.  
 Patented March 21, 1858, and March 22, 1859.







GLENDALÉ FEMALE SEMINARY.

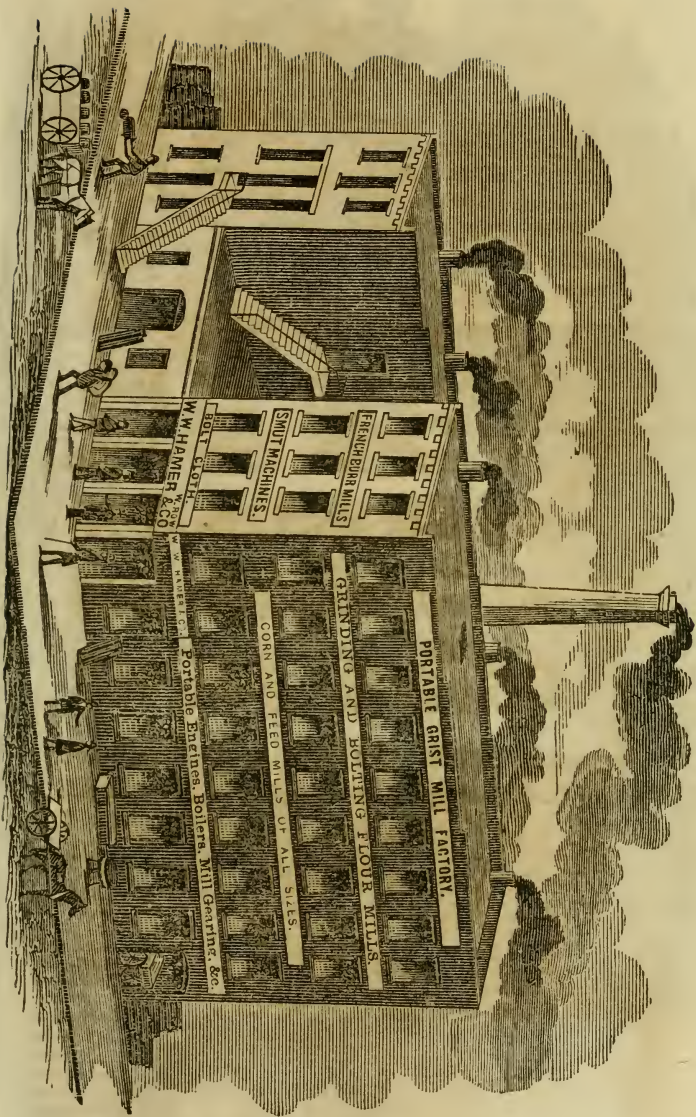


STEPTOE & M'FARLAN  
MANUFACTURERS  
OF PLANING MACHINES & CO

WESTERN  
STEPTOE  
& M'FARLAN  
MACHINE WORKS

WEVILL CIN





PORTABLE GRIST MILL FACTORY.

GRINDING AND BOILING FLOUR MILLS.

CORN AND FEED MILLS OF ALL SIZES.

Portable Engines, Boilers, Mill Gearing, &c.

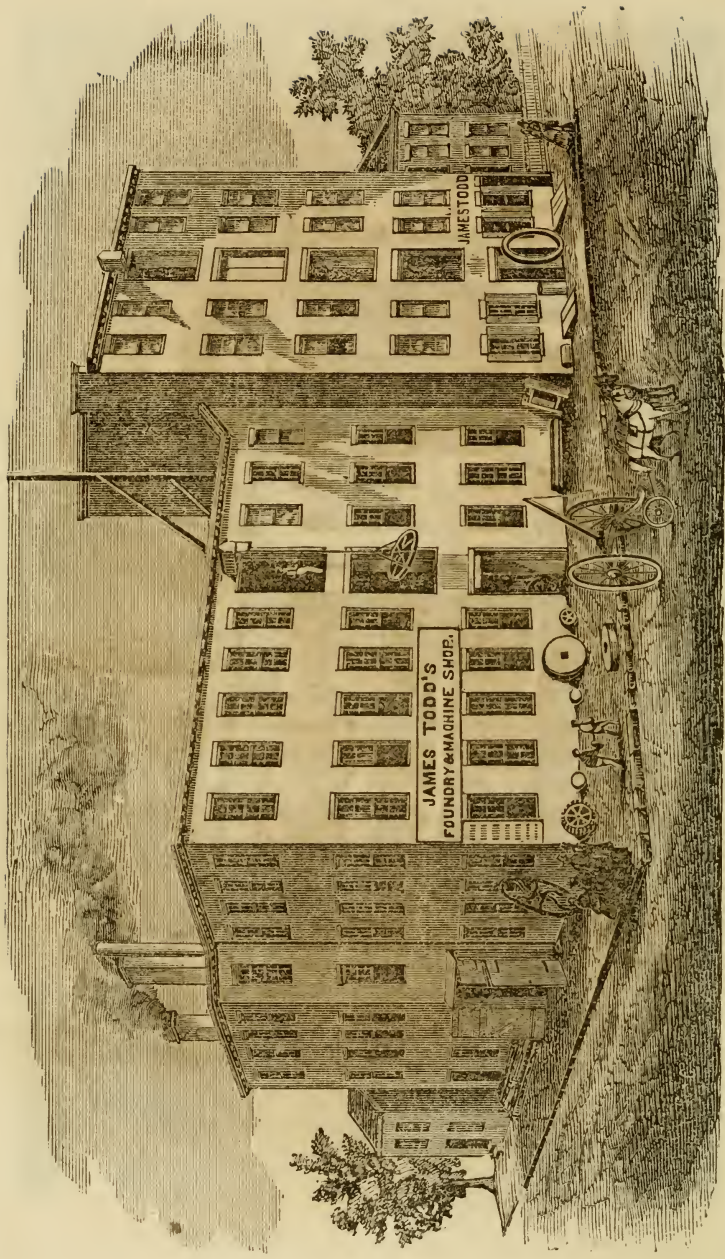
W. HAMER & CO.

W. HAMER & CO.

FRENCHBURG MILLS

SMUT MACHINES.

BOLT CLOTH.

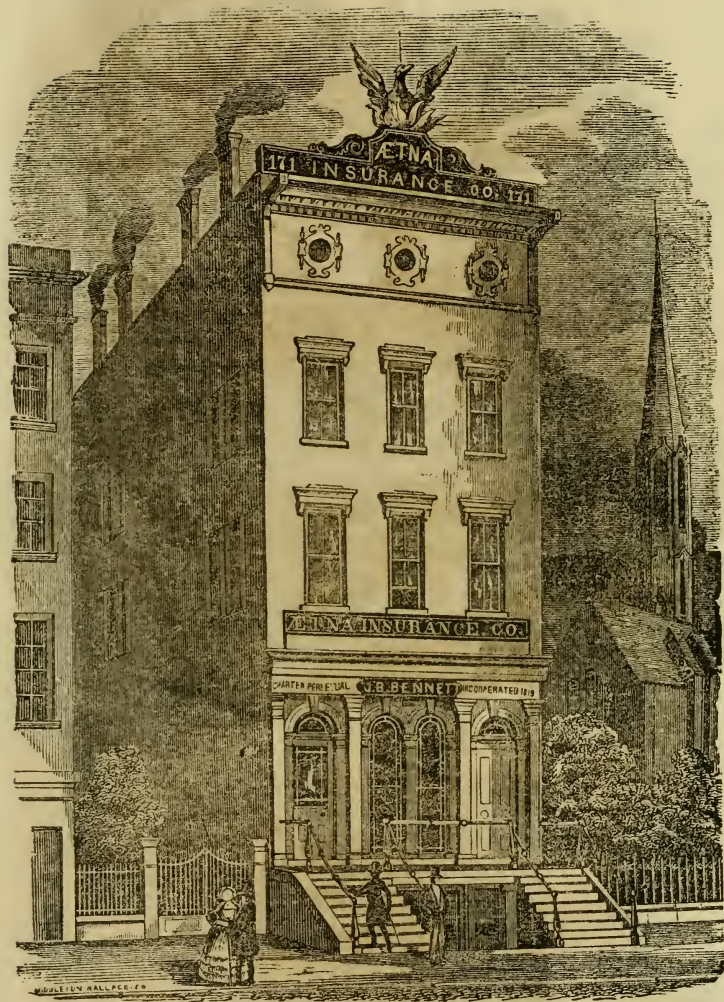


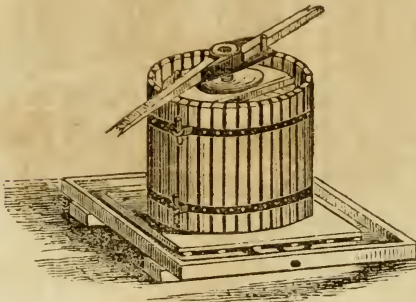
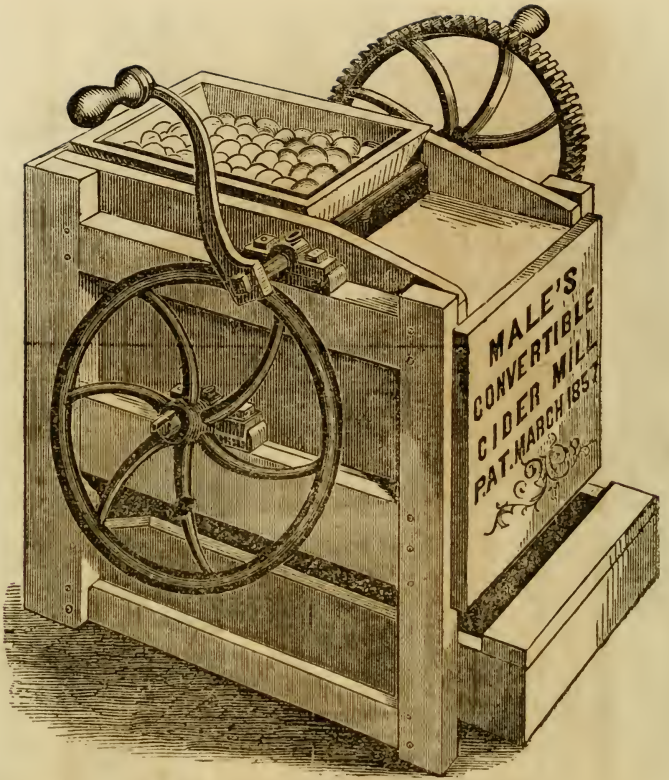
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IRON  
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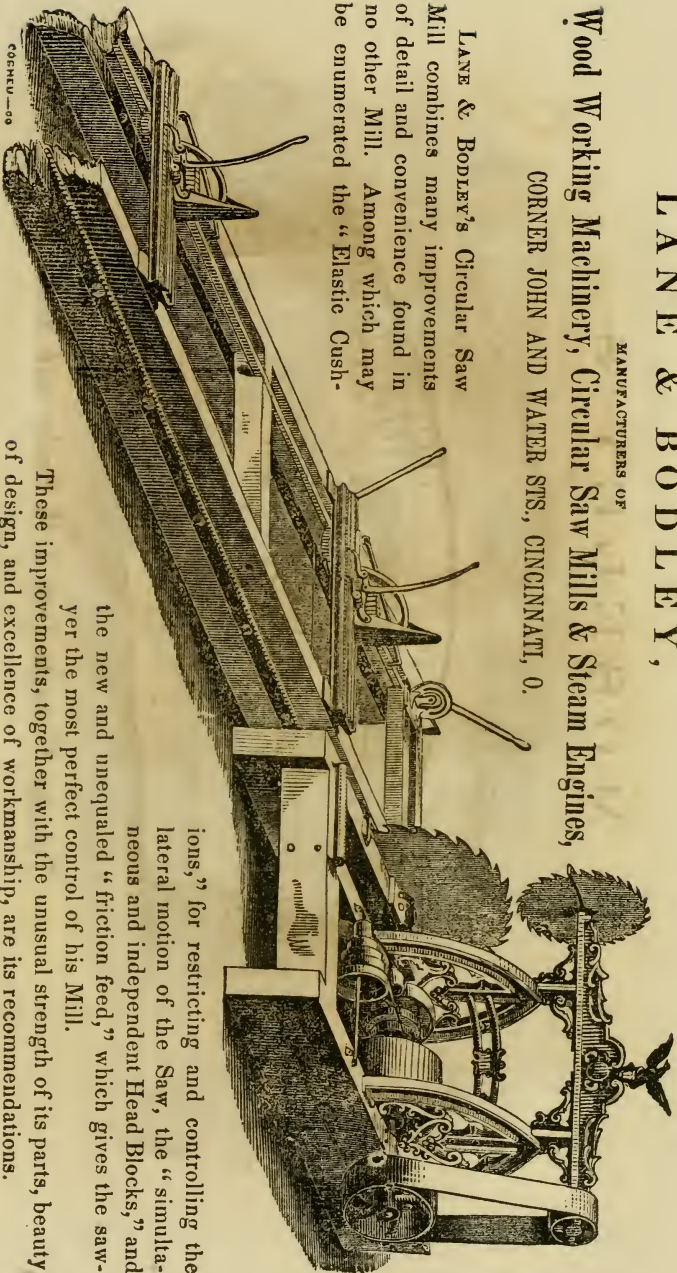
# LANE & BODLEY,

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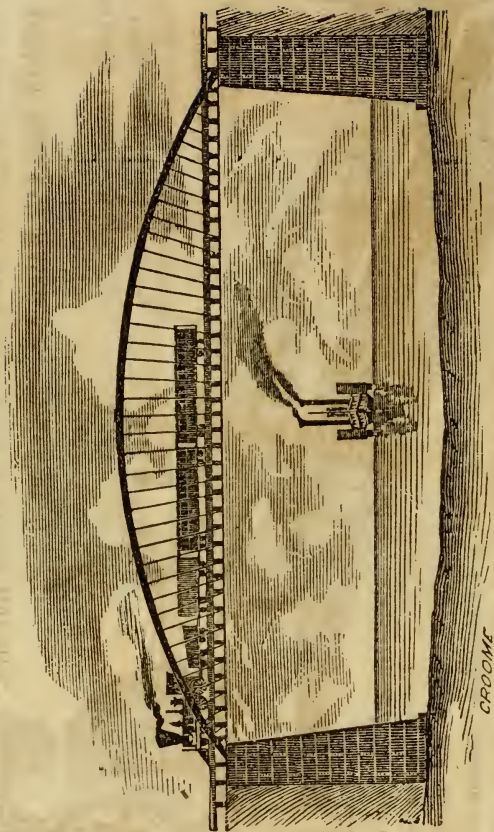
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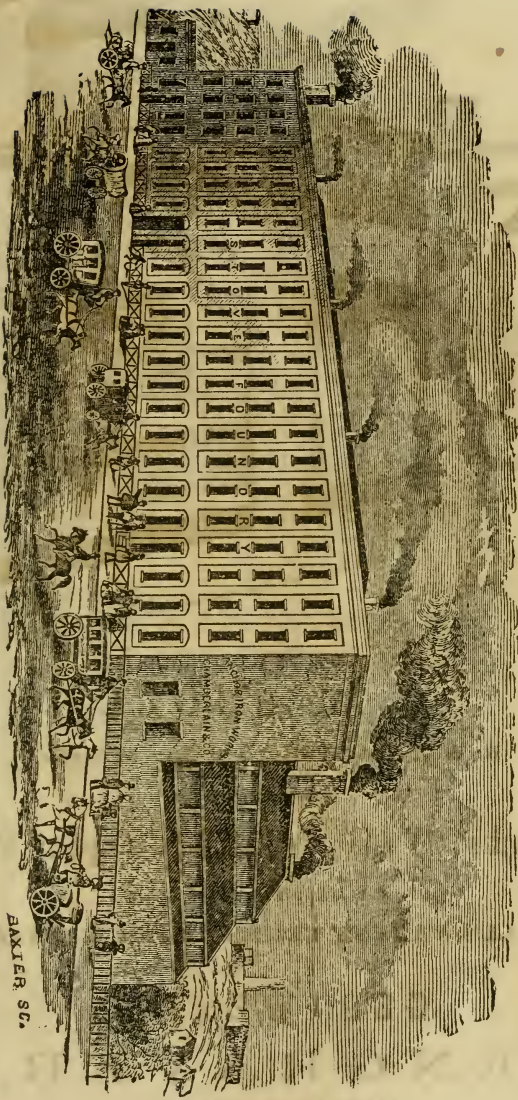
ions," for restricting and controlling the lateral motion of the Saw, the "simultaneous and independent Head Blocks," and the new and unequalled "friction feed," which gives the Sawyer the most perfect control of his Mill. These improvements, together with the unusual strength of its parts, beauty of design, and excellence of workmanship, are its recommendations.

MOSELLEY'S



CROOME

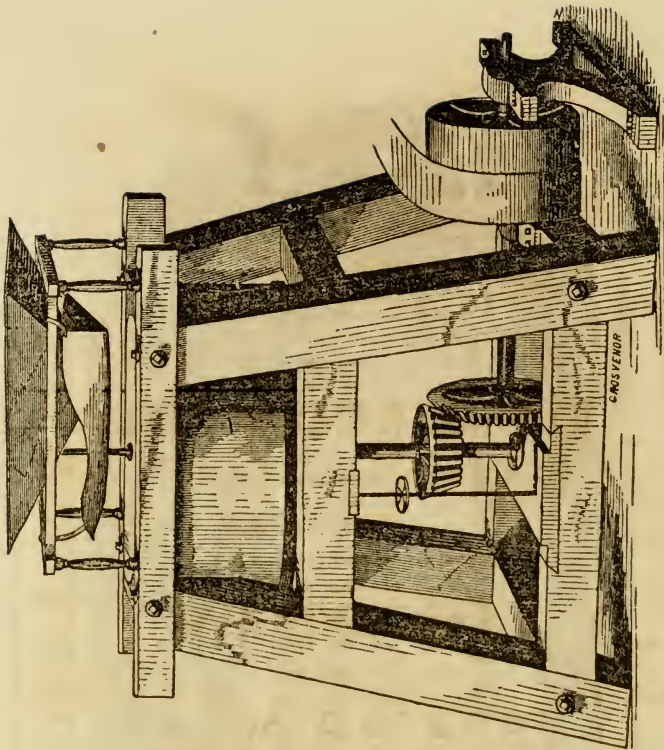
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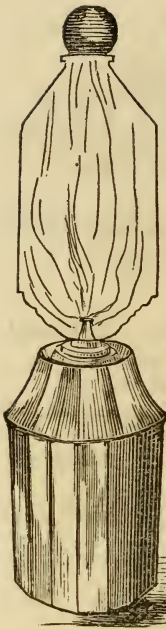
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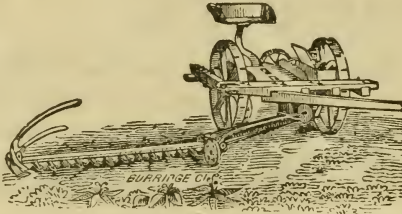
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Kip,  
Kid top Calf Congress Gaiters,  
Kid top Patent Leather Congress Gaiters,  
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Calf Button Gaiters.  
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Scotch Sole, "  
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" " Welt "  
Undressed morocco Welt "  
Calf " "  
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Dressed and undressed Calf, and morocco  
pegged Boots,  
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" " turns,  
" Kid and morocco Welt Boots,  
" " " heel do.  
" " " turn " do.  
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